

E09793

Cassell's Pet and Live Stock Series

1/6 EACH
Net, or
1/9
postfree
from CASSELL'S,
La Belle Sauvage, E.C.4

To those who keep pets for pleasure, and live stock for profit—in a small way—this series of little handbooks will prove of the greatest service, and are reliable beyond question.

...YOUR DOG ROBERT LEIGHTON.....

Valuable information on the training, feeding, and general treatment of a dog. Also first-aid hints—in fact, everything a dog-owner ought to know.

. CANARIES: & HOW TO KEEP THEM.

F. J. S. CHATTERTON

A guide to the successful keeping and rearing of canaries, either as pets or for breeding purposes.

..MODERN PIG-KEEPING.....

H. P. JAQUES

Written primarily for the small man, but anyone who keeps pigs will find this book a valuable guide to making the pig pay.

. DUCKS AND GEESE: AND HOW. TO KEEP THEM F. J. S. CHATTERTON

What are the best breeds to keep for egg-production, or for table purposes? How should they be housed and fed? These and a host of other important points are dealt with in this book.

. POPULAR CAGE BIRDS.....

JOHN ROBSON

Authoritative information and directions on the proper management, keeping, and breeding of these delightful pets.

..PRACTICAL RABBIT-KEEPING..

GEORGE A. TOWNSEND

This book will meet the needs of everyone who "goes in" for rabbit keeping, either as pets or for exhibition purposes.

. FOWLS: AND HOW TO KEEP THEM.....

ROSSLYN MANNERING

Everyone who keeps fowls, whether in the expectation of profit-making, or merely as a hobby, will find this book a real practical help.

Cassell & Co., Ltd.,



La Belle Sauvage, E.C.4.

The Best Paper for Wireless Amateurs

Amateur Wireless And Electrics

The Leading Weekly

Every
Thursday

3 D.

Devoted exclusively to the interests of Wireless Amateurs; explains the Underlying Principles; Makes the Way Plain to Beginners; Shows them How to Start; What to Do; What to Buy; What to Make, and How to Make It. Gives Expert Replies to Readers' Questions; no matter what the difficulty is, the Reader is helped out of it by Highly Skilled Experts; Wireless Club and Society Fixtures; and the Latest News of Wireless Developments. Fully illustrated by Helpful Diagrams and Photographs. ⚡ ⚡ ⚡

ON SALE EVERYWHERE

Cassell's, Publishers,

La Belle Sauvage, E.C.4.

CASSELL'S POCKET REFERENCE LIBRARY

Cloth, 1/3

Leather, 2 -

Cassell's Miniature English-French
Dictionary. By F. F. BOVET

Cassell's Miniature
French-English Dictionary. By F. F. BOVET

French Conversation for
English Travellers. By F. F. BOVET.

Cassell's Ready Reckoner.
By F. W. DUNN, B.A., B.Sc.

Proverbs and Maxims.
Classified by J. L. RAYNER.

Dictionary of Mythology.
By LEWIS SPENCE, M.A

A Dictionary of Musical Terms.
By JEFFREY PULVER

Dictionary of Poetical Quotations
Compiled by W. GURNEY BENHAM

Dictionary of Prose Quotations.
Compiled by W. GURNEY BENHAM

When Was That? By L. H. DAWSON

The Pocket Gardener.
By H. H. THOMAS.

The Pocket Doctor. By "MEDICUS."

Cassell's Pocket English Dictionary.
By E. W. EDMUND, M.A., B.Sc

Cloth 1/6, Leather 2/6 net.

Cassell's Miniature French-English-
English-French Dictionary. Cloth 2/6 net.

Cassell's Concise English Dictionary.
Crown 8vo. 512 pages, Cloth 2/- net.

Cassell's, Publishers,



La Belle Sauvage, E C 4

PRACTICAL UPHOLSTERY ILLUSTRATED

By C. S. TAYLOR

WITH 156 DIAGRAMS
AND PHOTOGRAPHS



CASSELL AND COMPANY, LTD
London, New York, Toronto and Melbourne

First published 1925

Printed in Great Britain

EDITOR'S PREFACE

THIS Handbook is written by an upholsterer and furniture maker and repairer who has a detailed knowledge of every phase of his craft. A feature of the book is the use made of photographs in teaching lessons which can never be wholly imparted by text alone. This book deals not only with tools and materials but describes in detail the methods of upholstering chairs of many kinds, easy chairs, stools, couches, settees and ottomans.

The author will be pleased to help, through the columns of "The Amateur Mechanic and Work," any reader who stumbles upon a difficulty. Letters should be addressed to the undersigned.

BERNARD E. JONES,
Editor "Amateur Mechanic and Work,"

La Belle Sauvage, E.C.4.

CONTENTS

CHAPTER	PAGE
1. TOOLS AND THEIR SPECIAL USES	1
2. MATERIALS, STUFFINGS AND SUNDRIES	8
3. UPHOLSTERING PINCUSHION CHAIRS	23
4. DINING-ROOM CHAIR	32
5. A CARVER CHAIR	39
6. SPRING-SEAT DRAWING-ROOM CHAIR	45
7. CHAIRS WITH LOOSE LIFT-OFF SEATS	52
8. "SHOW WOOD" EASY CHAIR	59
9. STUFF-OVER EASY CHAIR	69
10. FOOTSTOOLS	85
11. A FENDER STOOL AND A POUFFE	94
12. MUSIC STOOLS	101
13. A CHESTERFIELD	107
14. A SPRING-SEAT COUCH	126
15. AN OTTOMAN COUCH	135
16. BOX OTTOMANS	146
INDEX	153

UPHOLSTERY

CHAPTER I

Tools and their Special Uses

THE work of the upholsterer is generally that of adding the cushion or stuffed work to chairs, sofas, couches and kindred pieces of furniture, but, although the major part of his work is of this nature, it also includes the lining of wardrobes, cabinets, boxes, the making of mattresses and bedding, the draping of beds, the hanging of curtains, the laying of carpets, lino-



Fig. 1.—Stitching and Buttoning Needle.



Fig. 2.—Bayonet Needle

Fig. 3.—Spring Needle.

leums and other floor coverings, and in fact the handling of furnishing fabrics generally.

In furniture factories men specialise in one particular style of work, but it is the purpose of this handbook to give instruction on the practice of upholstery generally, and not as applied to any one style.

UPHOLSTERY

As the tool kit is the first consideration, this first chapter is devoted to an explanation of their uses.

Needles.—Of these a number of different patterns will be required. The buttoning needle (Fig. 1) is pointed on both ends and round in its entire length, with an eye on one end for the twine. It is made in lengths varying from 8 in. to 18 in., according to the size of the work for which it is required ; and, as its name implies, its use is for putting in buttons, and also for making long stitches of twine on seats, etc. The “ bayonet ” needle (Fig. 2) is also pointed on both ends ; but, unlike the stitching needle, one end of the bayonet is triangular in section, while the opposite end, which also contains the eye, is round. This needle is used for stitching edges, etc., and is made in a number of lengths, about 10 in. being a most useful size for all round work. The spring needle (Fig. 3) is bent at one end, the curved portion being triangular in section, while the straight part, which contains the eye at the extreme end, is round. A useful length for sewing in springs, stitching hessian, etc., is 4 in. The circular needle (Figs. 4 to 6) is almost semicircular in shape, and is made in a large range of sizes, the smaller of which are used for putting on cord, seaming material in “ surround ” work, etc., while the larger sizes are sometimes used for sewing in springs, instead of the spring needle. A selection of ordinary sewing needles is also wanted for sewing covers, etc., while one or two packing needles of various sizes for seaming hessians, etc., will be wanted.

Regulators.—In working up edges during stitching, and also for getting stuffing material into position in buttoned work, laying creases, etc., regulators are required. Of these there are two kinds, the one shown by Fig. 7, which is flat on one end, and pointed on the



Figs. 4 to 6.—Bent Needles.

other, being used in stitching, creasing, and for general purposes ; while the long-handled type of regulator (Fig. 8) is used for working stuffing material in buttoned work.

Hammers.—These are, of course, a very necessary part of the upholsterer's tool kit, and three of these at least will be required. The one known as a

Fig. 7.—Flat Regulator.



Fig. 8.—Long-handled Regulator.

"cabriole," and illustrated by Fig. 9, has a fine head, its use being for driving in gimp pins and for tacks in awkward corners. It is a most useful hammer and is quite indispensable, although practice is required before it can be used with ease, owing to the smallness of the head. What is termed an "upholsterer's" hammer is shown by Fig. 10. This is of a similar

UPHOLSTERY

style to the cabriole ; but the head is larger and heavier, and its use is for driving in tacks in all-round work. The type of hammer shown by Fig. 11 is used for driving in studs, brass edging nails, etc., the short, sharp blows which this hammer is capable of giving being preferable for this work to the long direct blow of the up-

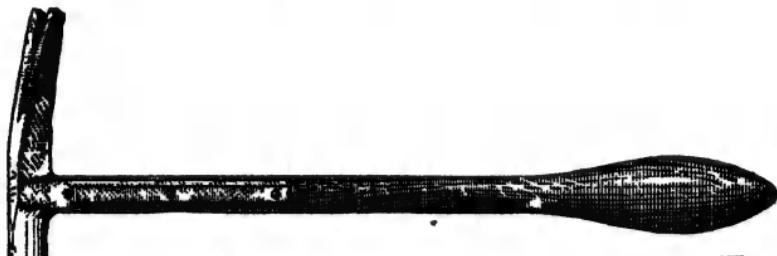


Fig. 9.—Cabriole Hammer.

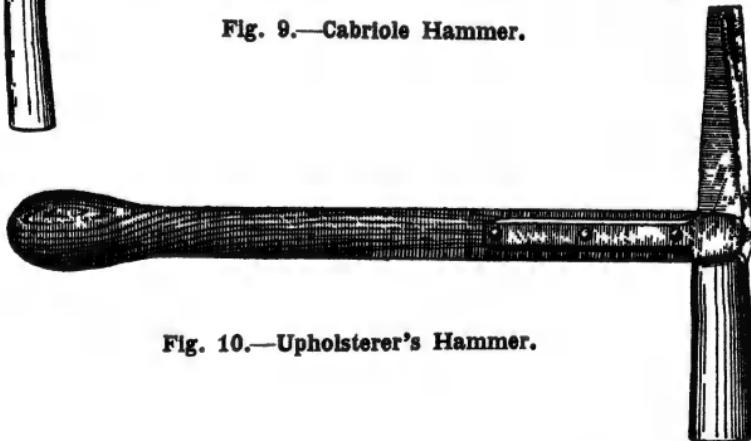


Fig. 10.—Upholsterer's Hammer.

holsterer's hammer. A Canterbury claw hammer will also be found useful for heavy driving, such as knocking off coach backs, etc.

Mallet and Ripping Chisel.—A mallet and an old chisel will be wanted for knocking off old covers, hussians, webs, etc., scissors or shears for cutting up materials, etc., trimming knife (Fig. 12) for clipping edges of leather coverings and cutting out corners,

besides skewers for holding springs in position on the spring canvas while they are being stitched on.

Web Strainers.—For straining the webbing one

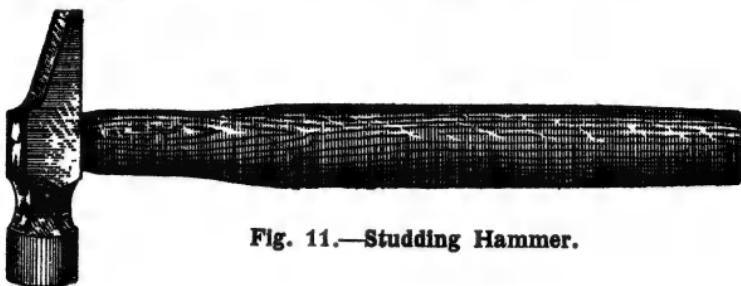


Fig. 11.—Studding Hammer.

or other of the patterns of web strainers shown by Figs. 13 and 14 will be wanted, the former being a sort of wide-mouthed pair of pliers, which is also found



Fig. 12.—Trimming Knife.

useful at times for straining spring canvas, etc.; while the latter is made of wood, and has spikes on each end for holding the webbing and keeping



Fig. 13.—Web Strainers.

the tool rigid on the frame while in use. There are also a number of other patterns of web strainers on the market ; but those in most general use are described above.

CHAPTER II

Materials, Stuffings and Sundries

IT will now be necessary to consider the various materials used in upholstery, particularly in relation to the estimation of the quantities required, for lack of such knowledge can only lead to waste of material and time. An understanding of the wearing capacity and good judgment in the selection of material as well as good taste in choice of colours and designs are qualities which should be cultivated.

In doing work for others it is best first to leave free choice in these matters ; but very often the upholsterer himself is expected to suggest, advise and recommend.

The number of materials for covering furniture is naturally very large, and the assortment of patterns consequently very varied. Under the heading of stiff coverings, which, correctly speaking, belong to the dining-room and library, may be mentioned the following :—

Roan.—Roan is a real leather obtained from the skins of sheep, which is tanned, dressed and dyed, and stamped with a grain and sometimes with a pattern.

Morocco.—Morocco is a goat skin, prepared in the same way as roan, but is softer than the latter and costs

more than double the price of roan. These two coverings are, of course, sold by the skin, which varies in price according to the quantity of usable material required. In ordering, measurements should be taken of the actual material required without blemish, especially where plain work is in hand, but in buttoning, little imperfections can often be worked out in the creases.

Pigskin.—Pigskin possesses fine wearing properties, but is very dear, and consequently is not in very great demand. The toughness of this leather necessitates its being softened with water and put on wet.

Imitation Leather.—Much of the trade which was at one time done in furniture leathers has been usurped by the various imitation leathers now on the market. Pegamoid, roanoid, thannette, pantasote, and rexine are the best-known varieties of imitation leathers which actually have a close resemblance to the real article. These cloths consist of a linen or duck base, on which is spread a composition. They are stamped in a variety of grains, and in some instances are hard to detect, when new, from the real thing. Being obtainable in running lengths, and in widths varying from 45 in. to 50 in., they are economical in use, and on account of the comparative lowness of price are in great favour with the public.

American cloth, called A. C. in the trade, was the origin of imitation leathers, although there is a great difference in appearance between this and real leather.

Tapestries.—Tapestries may be said to be of three

kinds, wool, silk, and mercerised. The mercerised description is composed largely of cotton, and goes through certain finishing processes in order to give it a lustre resembling that of silk, although when put to hard wear the covering quickly loses its attraction and becomes dead in appearance. Wool tapestries may be counted among the best of the soft coverings for withstanding hard wear, and, as they are obtainable in a large number of patterns and prices, are in good demand.

Real silk tapestries are not generally manufactured entirely from silk, but are backed up with cotton, the actual silk being on the face. The price of silk tapestries naturally depends on the quantity of silk used in their manufacture, which in the cheapest kinds is just about sufficient to enable it to be called silk. Tapestries are generally supposed to be six-quarter wide, but they generally finish about 50 in.

Utrecht.—Utrecht is self-coloured, and has a stiff cropped pile, which varies in length of staple with the price paid for it. Cotton, wool, and mohair are the materials from which the pile is woven.

Moquette.—As a variation from the solid effects rendered by plain velvet there is moquette, a 50-in. material with a velvet pile, and having a figuring in the form of colourings worked in the weaving. Cheap moquettes are made from a stock groundwork, the patterns being printed in after the material is made. There is, besides velvet moquette, one with an uncut pile which resembles Brussels carpet. The trimmings

of railway carriages are largely done in this material, which has excellent wearing qualities.

Stamped Velvet.—Stamped velvets are those in which the pile is depressed in places to form a figuring, the stamping being done by passing the material through heated rollers.

Genoa Velvet.—Genoa velvet has a raised velvet figuring with a flat groundwork, which latter often contains, in the better qualities, a certain amount of silk. Good-quality Genoa velvets are very rich in tone, and are high in price.

Saddlebags.—Saddlebags are used in combination with plain or Utrecht velvet, to which they are seamed. The actual "bags" or squares are of various kinds, such as mohair; a close velvet of good wearing properties; moquette woollen pile, of longer staple than mohair and good wearing capabilities; chenille, a heavy piled "bag" having a solid appearance; and cotton bags, an unreliable variety with a printed pattern. Saddlebags are made in standard sizes of 18 in. and 22 in., while for couches a long bag, measuring 22 in. by 44 in. and called a "rug," is often used.

Plush.—Plush is, or should be, a material with a silk pile, that yields various effects according to the light in which it is held. Whole suites are sometimes entirely covered with this material, although it is comparatively seldom that this is done, a more common practice being to use it in conjunction with silk tapestry, the plush forming the surrounds of the seats, etc. By judicious selection of colourings some very fine

effects are obtainable in silk tapestry and plush work, which is particularly suited to the covering of drawing-room furniture.

Plushette.—Plushette, as its name implies, is a sort of imitation of plush. It is a woollen material with a longish, rather shaggy pile, and is but seldom used as an entire covering for furniture, being more suitable as an outside backing for velvet and saddlebag suites, in cases where cost of material has to be cut down. Plushette is mostly 45 in. wide, while velvets and pluses, although obtainable in a variety of widths, are most commonly 24 in. wide.

Art Serge.—Art serge is a cheap material of various colours. It cannot be recommended for wear, although the low price at which it can be obtained induces people to use it as a covering material. It is, in reality, more suitable for draperies than for upholstery. The width is mostly 45 in.

Repps.—Repps are not much in favour nowadays, although at one time they were in great demand. They are rather expensive coverings, but are good wearing, and usually 45 in. wide.

Carriage Cloth.—Carriage cloth is in reality more applicable to coach trimming than to upholstery, but one occasionally has to use it for some particular purpose. It is a sort of low-quality billiard cloth, made in the West of England, and runs about 60 in. wide.

Hair Seating.—Hair seating is another kind of old-fashioned material, for which there is but little demand, excepting for the upholstering of smoking

compartments of railway carriages. The stuff is woven from horsehair, and is consequently very strong, although it is rather sombre in effect, that used for furniture covering being black in colour. It is quite unsuited for buttoning with creases, and if buttons have to be used, they should be but lightly pulled in. Hair-seating can only be cut in the length, each width required being obtainable. There is an imitation of hair-seating which should not be used for anything but outside backing. The width of this material is 50 in., and the price at which it can be obtained corresponds with its quality.

Sateens.—Sateens, of various colourings and qualities, and measuring 30 in. wide, are often used for outside backs of easy chairs, couches, etc., in order to keep down the cost of coverings. They are a cotton fabric having a semi-lustrous surface.

Cretonnes.—Cretonnes also have recently been much used as the permanent covers for upholstering Chesterfields, easy chairs and suites, whereas they were for loose covers only in ordinary times. They are, however, the usual material for ottoman couches and boxes, also for basket chairs. The commonest widths are 27 in. and 31 in.

Corduroy.—Corduroy has come much more into use than ever before through the scarcity of other fabrics during the war. It can be obtained in shades of brown, grey, green, blue, and printed in various colours and designs, and fine or coarse in the cord. The brown goes well with oak dining-room furniture,

even of good quality, and the greys have found favour in good-class drawing-rooms. They are usually 27 in. to 54 in. wide.

Various Trimmings.—Among the trimmings used by the upholsterer are : Bandings, for use with real and imitation leathers, these being put on round the framework where the covering finishes off, studs having heads covered with the same material as the banding and used to keep the latter in position. For surrounding the edges of tapestry and other soft coverings, gimps of various patterns and colourings are most commonly used, these being fixed by means of pins made specially for the purpose, or with small-headed studs. Edging nails, having round heads and made of brass, sold either natural colour or plated copper, silver, or antique, are also used as a finish for the edges of covering materials, more especially in conjunction with the thin flat solid seats known as pincushion. These nails are made in a number of sizes, and are packed in boxes of 1,000. Rouch is a kind of fluffy gimp, and is used for edging heavy coverings such as moquette, saddlebags, etc. Cord is a silk-covered material used for stitching to the edges of upholstered furniture, in order to give a finish to the article. It is particularly useful in hiding the joins in combined tapestry and plush work. Rope is a kind of thick cord, and finds a place where the upholstery is carried out with rolls. Cord, gimp, rouch, and banding are each put up in pieces of 36 yd., but cut lengths can be obtained if required.

Materials for Stuffing : Horsehair.—The shapes seen worked up on upholstered furniture require the use of certain stuffing materials, and although in the best classes of work horsehair is used throughout, cheapness necessitates the substitution of inferior materials. Stuffing, as the term is applied to the actual work, is divided into two distinct operations, namely, first and second, the first stuffing comprising the working up of the edges with the assistance of canvas and twine. As a first stuffing, a firm material is required, and nothing really excels horsehair for the purpose ; as a substitute, however, there are a number of materials in use, among which are the following :

Alva.—Alva is a seaweed from the Baltic. This material is in long thin strands, and should be used perfectly dry, as when wet it is liable to breed vermin of an objectionable character. Alva which has become broken up by continual use is not nearly so good for stuffing, and therefore care should be taken in tearing it asunder in re-upholstered work, the hands only being used for the purpose, and on no account should cards or machining be resorted to.

Coir.—Coir, as it is termed in the trade, is in reality coconut fibre, and can be recommended for first stuffing work. It should be of the long stapled variety and free from dust.

Woodwool.—Woodwool is the thin strip wood shavings used for packing purposes. It has the advantage of being very clean and cheap, and is used as a first stuffing on medium-class goods. In course

of time it crumbles into wood-dust. Both flocks and hair are used with it as a second stuffing.

Algerian Grass.—Algerian grass is another substitute for horsehair, for which latter material it is often used as an adulterant. When long stapled it works up well for edges, and it may be counted among the best of the substitutes for hair. In the cheapest classes of work anything is considered good enough for first stuffings—woodwool, shavings, hay, and straw each finding a place in stitched edges. Where good work is required, good materials should be used, and it will be found that the best stuffs prove the cheapest in the long run.

Wool Fillings.—For second stuffing horsehair is the best material to use ; but here again the worker is hampered by the question of cost. As a substitute for hair one or other of the wool fillings can be used, care being taken that they are pure and clean. Medium-grade work often has wool as a base in the second stuffing with a top dressing of hair, this lending a softness to the seat unobtainable with the use of wool alone. Wool flocks are of various qualities, the cheapest being known in the trade as "shoddy," while the quality of the material rises by steps until the pure white wool is reached, intermediate qualities being unwashed and washed ruggings, linseys, mixtures, etc. Cotton flocks are entirely unsuited to chair upholstery, as they are hard and unyielding, and in the cheaper qualities contain a quantity of husks.

Wadding.—Wadding is a largely used material,

and is obtainable in two kinds, "sheet" and "bundle." The former is used principally on seat backs, etc., which are upholstered plain (that is, unbuttoned), while the latter plays an important part in buttoned work, fancy surrounds, etc. Sheet wadding should be bought in the piece of 12 yd.

Webbing.—Webbing forms an important part in upholstery work, as the whole of the weight is practically supported by this material. There are two kinds of webbing in use, English and German. The former is the better and dearer, and is known for size by numbers, each width having a particular number, such as 10, 12, etc., which all manufacturers observe. English webbing is put up in pieces of 18 yd. German web is a far commoner material than English, but can be relied on for lasting work. The sizes are known by the number of strips of colour contained in its length, such as four blue, three red, etc.; the greater the number of strips the wider the material. Whole pieces contain 36 yd.

Springs.—Springs are used in the seats, backs, etc., of furniture, and are made from steel wire having a coating of copper to prevent their rusting and rotting the webbing and canvas with which they come in contact. There is a large difference in the quality of springs, some being made from better-tempered wire than others, the cheaper kinds being stiff and unyielding, while the best kinds yield evenly to compression. They are made in a number of sizes to meet the requirements of the trade.

Twine.—Upholsterers' twine plays an important part in the work, for which it is specially made. It is very strong, and has a well-finished surface, in order that it may not unravel with the continual pulling through the stuffing material to which it has to be subjected. It is sold in balls weighing $\frac{1}{2}$ lb., and is of various thicknesses according to the work for which it is required.

Laid Cord.—Laid cord is used for lashing springs together in order that they may not work out of position. It is in reality a thick string of good quality, and is sold in balls of 1 lb. upwards.

Hessian.—Hessian is a canvas made in various qualities for the upholstering and allied trades. The cheaper hessians are coarse in texture, and the thread from which they are woven is shaggy, and where strength is required they cannot be recommended. Good-quality hessians are fine in texture, light in colour, and very strong. These latter kinds should be used for the bottoms of chairs, etc., spring canvas, and in any work requiring durability. Cheap hessians are often used as a substitute for scrim, to which they are inferior.

Scrim.—Scrim is a fine canvas of open mesh made from a fine thread, its use being in first stuffings, to hold the filling material. It is superior to coarse hessian for the purpose, as it answers well to the action of the regulator in working up edges for stitching. Both scrim and hessian are made in a variety of widths, but usually in multiples of $\frac{1}{4}$ yd. The

two most useful widths for upholsterers are 6/4 (called six-quarter in the trade and representing 1½ yd.) and 8/4 (2 yd.).

Black Linen.—Black linen is a closely woven material generally of 4/4 width, and used as a substitute for hessian for the underneath of chair seats, etc. Its cost is rather more than that of hessian.

Calico.—Upholsterers' unbleached calico is sold in 70-in. width, and is rather finer and softer than the ordinary household calico. In good-class furniture, excepting in the case of buttoned work, a covering of calico is always run underneath the final covering material ; and although calico is sometimes used in conjunction with buttoning, it is questionable whether it is possible to obtain such good results with the creasing as when the covering is run direct on to bundle wadding.

Tacks.—Upholsterers' tacks are of two kinds, "fine" and "improved"; the former, of which two sizes are used, $\frac{3}{8}$ in. and $\frac{1}{2}$ in., is for tacking on covers, hessians, etc., while the latter kind, which for ordinary work should be $\frac{5}{8}$ in. long, is used for putting on spring canvas, webbing, etc. Improved tacks are thicker in the body and larger in the head than fine. Both varieties are put up in large packets containing ten small packets of 1,000 tacks in each.

Buttons.—Buttons are sold in one-gross packets, or they can be made to the customer's order from his own materials.

Furniture Frames.—Frames of chairs, couches,

UPHOLSTERY

<i>50" MATERIAL</i>	
5' 5"	Couch Seat 38" x 65" Couch Pad 9 x 44"
3' 2"	Gent's Easy Seat 36" x 38" Lady's Easy Outside Back 14" x 16"
3' 0"	Lady's Easy Seat 34" x 36" Gent's Easy Outside Back 16" x 18"
1' 0"	Gent's Easy Inside Back 20" x 22" Lady's Easy Inside Back 16" x 20"
3' 0"	Couch Scroll 40" x 36"
1' 8"	Outside Back Couch 27" x 20"
2' 1"	Standard Seat 25" x 25" Ditto
2' 1"	Ditto Ditto
2' 1"	Ditto Ditto

Fig. 15.—Method of Cutting up Material Economically.

sofas, complete suites of furniture, etc., can be purchased ready-made, or made to order from chairmakers who specialise in that work. They are of two types : the stuff-over and show-wood types, phrases which in themselves explain their meanings. All upholstering stuffs can be obtained from upholsterers' supply stores.

Measuring a Suite and Cutting up Covering Materials. — The question of cutting up covering material is one which requires very careful consideration, as by the exercising of a little fore-thought and scheming a great deal of expense may often be saved. Before ordering the material, careful measurements should be taken of every piece required and the sizes carefully checked. Each of the pieces, with their names and dimensions, should be put down on paper, in order that a plan may be drawn of the material, and each piece noted thereon. The following list contains working par-

ticulars of the pieces required to cover a typical nine-piece suite ; and although individual suites require different parts and sizes, the list will serve to illustrate the correct methods to be followed in setting out the covers.

The pieces required are : *Couch*.—Seat, 38 in. by 65 in. ; head or scroll, 40 in. by 36 in. ; pad, 9 in. by 44 in. ; outside back of scroll, 27 in. by 20 in. *Gent's easy chair*.—Seat, 36 in. by 38 in. ; inside back, 20 in. by 22 in. ; outside back, 16 in. by 18 in. ; pads, two, each measuring 8 in. by 12 in. *Lady's easy chair*.—Seat, 34 in. by 36 in. ; inside back, 18 in. by 20 in. ; outside back, 14 in. by 16 in. *Standard chairs*.—Seats, six pieces will be required, each measuring 25 in. by 25 in.

In the foregoing list, which is complete as far as that particular suite is concerned, the first dimension of each of the pieces is the width, and the second is the length. The worker will do well always to accustom himself to taking either the width or length first, as by so doing he will know at a glance which measurement is denoted—an important point in dealing with figured material.

An instance of the benefit to be derived from following a certain course will be found, say, in finding the position to be occupied in setting out the cover of the gent's easy seat on the cutting-up plan. Here the dimensions are 36 in. by 38 in. It is known that the first measurement denotes width ; but had the figures been put down indiscriminately, the width

UPHOLSTERY

might have been one figure or the other, and to make certain it would be necessary to re-measure the seat in question.

The list of pieces having been made, a plan is prepared of the material, and in Fig. 15 is shown this plan with the various pieces marked on 50-in. material, the suite being covered entirely with one kind of stuff. From the diagram it will be seen that exactly 24 ft. 4 in. of material will be required, the nearest measurement obtainable being $8\frac{1}{4}$ yd. An experienced upholsterer would, however, make 8 yd. suffice.

CHAPTER III

Upholstering Pincushion Chairs

HAVING detailed the upholsterers' tools and materials and their varied purposes, instructions will now be given for the upholstering of a progressive series of pieces of furniture, starting with simple pincushion-stuffed chairs.

It will be convenient to deal with the subject as if the furniture were being newly upholstered, but of course the treatment would be the same for renovation.

Stripping.—Where the furniture has to be re-upholstered it will be necessary in most cases to knock the old stuffing right off, using the mallet and chisel to drive out the tacks, which should all be removed from the frames before the work of re-stuffing is attempted. The old stuffing having been knocked off, the frame should be overhauled for defects, such as weak joints, loose braces, etc.

What is termed "pincushion upholstery" is one of the simplest forms of the stuffer's work. It can be quickly done, and is a very useful, economical way of cushioning chair-seats, etc., especially where cost has to be considered. But though frequently used on cheap furniture, it is often employed on middle-class and even first-class furniture as well. Of course,

with the latter, superior quality materials and particular workmanship are essential. Some examples are here to be given.

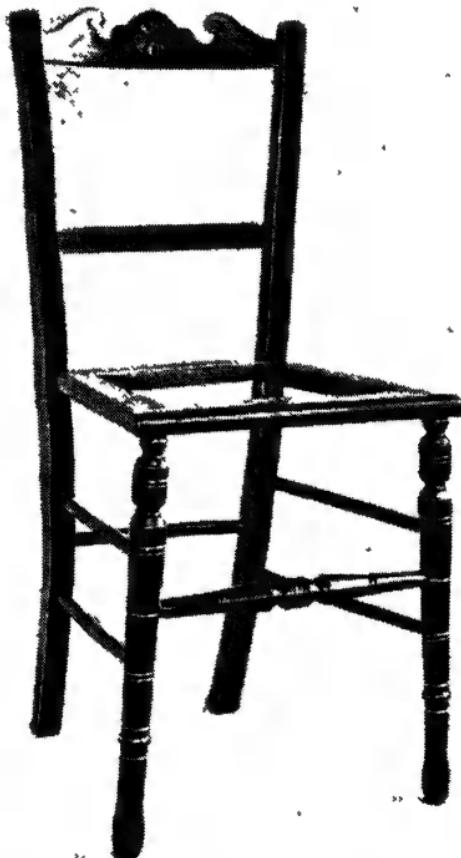


Fig. 16.—Frame of Bedroom Chair.

Fig. 16 shows the framework of a bedroom chair of the ordinary wholesale manufactured type, and there are other patterns to which this same treatment can be applied. Such chairs are either cane-seated or pincushion upholstered,

Webbing the Seat.—The seat frame of the chair has sharp square edges which should be rasped off slightly round, as it has a tendency to wear out the webbing and canvas in too short a time. The method of webbing is shown by Fig. 17. Cheap striped web is used, fixed by means of ordinary $\frac{1}{2}$ -in. tacks, be-



Fig. 17.—Webbing Chair Seat.

cause the rails are not substantial enough to stand the webbing tacks. In fact, these kinds of seats are not quite solid enough to receive tacks, and it is as well, when hitting them down finally, to hold a weight against the under side. The web work is commenced by fixing the centre one from back to front, and Fig. 18 shows it finished. A cover of canvas is next tacked over, stretched, and the edges doubled in; and a gauge line is marked on the upper surface of each rail, $\frac{5}{8}$ in. on, within which the upholstery must be kept.

The Covering Material.—The covering material is usually a plain dark red rep, which goes well with the colour of the wood frames, of birch stained and finished to imitate walnut wood. The cover is cut $\frac{1}{2}$ in. over all round on the seat frame. This will allow for the swell of the stuffing and turning in of the edges. It is temporarily fixed at the back edge with $\frac{3}{8}$ -in. tacks.



Fig. 18.—Chair Seat Completely Webbed.

Stuffing.—A $\frac{1}{2}$ lb. of grey flock is packed evenly on the canvas; see Fig. 19, which shows half the flock only in place. When it is all on, pressed closely to shape with the hands, the cover is drawn over to be first fixed lightly with the $\frac{3}{8}$ -in. tacks. Then, after further pressing and stroking, the centre tacks are pulled, a few at a time, to turn in the edges, stretched to the marked line and re-tacked, working to the corners. The tacked edges are covered with

UPHOLSTERING PINCUSHION CHAIRS 27

a scroll of gimp of colour to match the stuff, fixed with fine gimp pins, and it is then as shown by Fig. 20.

Pincushion Occasional Chairs.—Occasional chairs of the sitting-room variety are subjects for showing good taste in “pincushion upholstery.” The framework for one of these is shown by Fig. 21.



Fig. 19.—Webbed Seat Covered with Canvas, and Half of Flock Stuffing in Place.

In the occasional chair frame shown by the photograph, it will be seen that the back splat is intended for stuffed work in the centre part, and it is usually more convenient to do this before the seat. It is to be close, oxidised brass studded in the form of a shield enclosing the design in silk tapestry, and the wood being barely $\frac{1}{2}$ in. thick, precaution has to be taken to avoid splitting. With a pair of com-

UPHOLSTERY

passes the points for the studs are set out, and pierced with a fine bradawl of a size that the stud pin will fit the hole tightly. The wood has to be covered



Fig. 20.—Pine cushion Chair Upholstered.

with a little soft flock and a layer of wadding, then the tapestry is fixed over with partly driven gimp pins about 1 in. apart. In the spaces between, the studs are inserted and the gimp pins are pulled as they happen to be in the way. The chair is laid

on its back for doing this work, with a block of wood under the splat to give solidity for hammering.

In upholstering the seat of these chairs, for the



Fig. 21.—Frame of Occasional Chair.

sake of giving a more finished appearance underneath, a piece of black, sized linen is first fixed over the space with $\frac{3}{8}$ -in. tacks, then it is webbed, canvassed and stuffed in the same manner as the chair previously described. But the flock is covered with two layers

of sheet wadding, and the tapestry cover is put on and studded the same as the back splat. The finished chair is shown by Fig. 22.



Fig. 22.—Chair in Pincushion Upholstery and Metal Studs.

Pincushion Drawing-room Chair.—A superior modern-made drawing-room chair is shown by Fig. 22a.

The pincushion upholstery of this chair is very similar to the last one described, except that high-class materials only are used. The space is first

UPHOLSTERING PINCUSHION CHAIRS 31

covered with strong, fine, black-glazed linen, then webbed with best web, three each way, covered with strong coarse linen instead of hessian canvas, stuffed



Fig. 22a.—Drawing-room Chair in Pincushion Upholstery, Silk Tapestry and Gimp.

with curled white horsehair and covered with calico ; then two layers of wadding and the final cover of fine silk tapestry. The tacking is covered with Spanish gimp, fixed with fine white gimp pins.

CHAPTER IV

Dining-room Chair

THE chair frame shown by Fig. 23 is made in good mahogany, the tacking rails of the seat being of birch. It may be stuffed with nearly all curled horse-



Fig. 23.—Frame of Mahogany Dining-room Chair with Curved Seat-rails.

hair, stitched up into firm edges in the recognised method as practised by upholsterers for many genera-

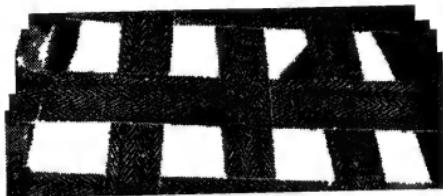


Fig. 24.—Plan of Seat Frame. Webbed.

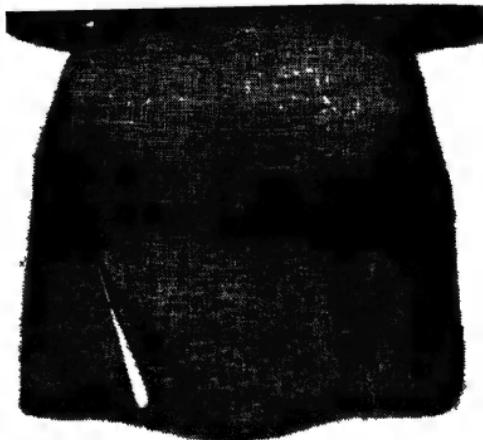


Fig. 25.—Plan of Seat, First Stuffed.

tions. The covering material may be Rexine or norocco grain and colour.

Webbing and Canvassing.—The rails of the seat

frame are all curved, and the stuffed work must follow the contour of the woodwork. This is seen in Fig. 24, with the webbing done on the upper side of the rails. It must be covered with canvas and



Fig. 26.—Blind-stitching the Stuffed Edges.

string looped as previously shown ; but the curves require the loops to be shorter than on a straight rail. Four loops should be put on the front rail, three on the side rails, and two on the back.

First Stuffing.—A pound of hair is required for the first stuffing, first packed firmly under the loops, then the interior part filled in ; but about $\frac{3}{4}$ lb. of white flock is first spread over the canvas. This economises the hair and keeps it from sticking through the canvas, though some upholsterers prefer that it should be felt through the canvas to prove that it is hair-stuffed.

Covering with Scrim.—In covering it with the scrim particular care has to be taken to get the seat of good shape, soft and springy. The scrim is cut

to 24 in. square, measured and cut true by drawing a thread. The front and back rails are marked central, also the edges of the scrim, to be accurately put on with about three partly driven tacks at each rail. Then it is worked down to shape, temporarily tacked alternately on all four sides. When it is about the right shape, the scrim edges are doubled in and fixed with $\frac{1}{2}$ -in. tacks, about $\frac{3}{4}$ in. apart, along the corner edge of the rails. It will require some use of the regulator to work the stuffing still firmer to the edges as in Fig. 25.

Stitching.—It is now ready for the first row of blind-stitching, which is commenced at the left-hand



Fig. 27.—Back Thrust in Blind-stitching.

corner (that is, at the back right leg), and worked right round the seat. In Fig. 26 the stitching has reached a point a few inches from the left front leg. The fore-point of the needle is thrust in close to the

tacked edge, about 1 in. from the last stitch made, appearing about 3 in. on the top scrim, to be drawn through as far as the eye. Then the back point is directed and thrust out at the end of the last stitch and the twine given a twist round the needle, as in Fig. 27, which is then drawn out and pulled tight, as in Fig. 28. Meanwhile, the left hand is pressing and squeezing the stuffed work into shape.

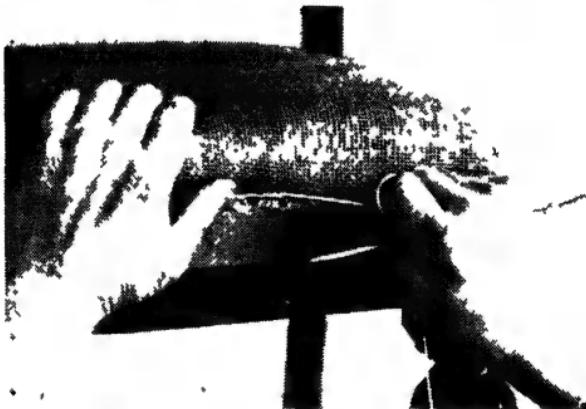


Fig. 28.—Drawing the Stitch Tight.

The regulator is again used to make the stuffing as firm as possible at the point where the roll has to be formed by another row of stitching. This is similar, but differs from the blind stitching in that the needle is drawn right through at the forward thrust, and when thrust back forms a stitch on the upper scrim ; see Fig. 29. The purpose is to form a neat roll about the thickness of the finger, and this is helped by pinching it into shape whilst being stitched. It may also require a little humouring when finished and regulating before stitching to the bottom, and second



Fig. 29.—Back Thrust in Stitching the Roll.



Fig. 30.—Calico Cover over Second Stuffing.

stuffing. This latter consists of $\frac{3}{4}$ lb. of hair packed neatly on and covered with calico. This, too, is temporarily tacked at first in the manner shown by Fig. 30, using $\frac{3}{8}$ -in. tacks, until it is brought to the

right shape, then tacked down and trimmed off about $\frac{3}{4}$ in. from the polished wood.

The Covering.

—Two layers of sheet wadding are put over the calico before putting on the final cover of Rexine, which measures 23 in. square. The wadding gives it a soft, comfortable feel very like the real morocco skin. The tacked edges,



Fig. 31.—Dining-room Chair Upholstered in Rexine.

when covered with skin banding and studs, still further give the appearance of real leather; but in this and in most cases Rexine banding and studs are used. The finished chair is shown by Fig. 31.

CHAPTER V

A Carver Chair

IN describing the upholstering of a carver chair, the information given applies to the set of dining-room chairs to which it belongs (see the preceding chapter).



Fig. 32.—Frame of Mahogany Carver Chair.

These sets of chairs comprise one arm-chair or "carver," as it is termed, for the head of the table, and four ordinary chairs or "smalls," as they are called in the trade, making a set of five pieces of furniture. Sometimes two arm-chairs are included, making a six-piece set. An eight-piece set consists of two carvers and six smalls.

Webbing the Frame.—The frame of a typical

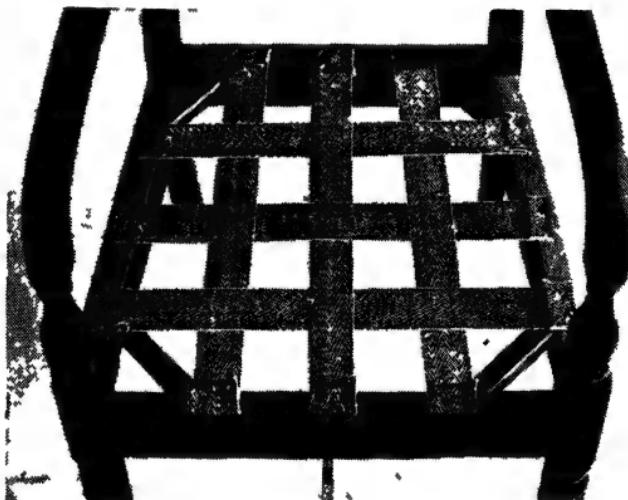


Fig. 33.—Seat Frame Webbed.

carver chair of a good type is shown by Fig. 32. No. 12 English web is used for this, three each way on the upper edge of the seat rails, as shown in Fig. 33.

Canvassing and Stuffing.—A strong canvas is then stretched and tacked over and the rails are string looped, for packing the stuffing, which is of curled horsehair, a mixture of black and grey. It must be packed particularly firm under the loops on the front rail; but on the sides and back rails it can be

moderately soft. The quantity of hair for this seat is $1\frac{1}{2}$ lb., as it is not to be deeply stuffed. When all is packed on it has the appearance shown by Fig. 34. The high rise shows the springiness of the curled



Fig. 34.—Hair Stuffing Ready for Covering with Scrim.

hair; but when it is covered with scrim and worked down to the required shape, the front edge is given just one row of blind-stitching. It is then as seen in Fig. 35, and should now be polished before completing the upholstering.

Applying the Material.—At this stage it requires some working up by means of the regulator to work the stuffing well forward. Two layers of sheet wadding are put over the scrim, and the cover of material is



Fig. 35.—Chair Ready to Receive Wadding and Cover.

placed evenly on, fixed at the front and back rails by a few partly driven tacks. The stuff has to be cut away at the corners to fit round the legs, in a way that allows a little for turning in neatly (*see Fig. 36*).

Then the cover is drawn into correct position, and fixed by partly driven tacks at $\frac{1}{4}$ in. from the lower edge of the rails. The edges of the material must be fixed permanently on the under edge of the rails, and the butt end of the regulator is used to put in the cut edges neatly at the legs.

Banding and Studding.—Now, as there are no

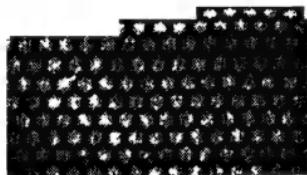


Fig. 36.—Fitting Moquette Cover on Seat.

tacked edges showing on the upholstery, there is no necessity for any gimp or banding ; but it will improve the appearance to band and stud the edges of the seat. For this, 5 ft. of leather banding is required, of a colour in keeping with the material, and three dozen studs to match, the positions of which may be set out with the compasses, ten at the front, nine at each side and eight at the back.

Instead of the banding these kind of chairs are

sometimes close metal studded, generally oxidised brass, or antique as they are termed.

The upholstering of the ordinary chairs of this



Fig. 37.—The Carver Chair Completely Upholstered.

set is the same as the carver, except that the front corners of the seat are of the usual plain kind. The upholstering completed (see Fig. 37), the practice is to give a final finish of polish.

CHAPTER VI

Spring-seat Drawing-room Chair

FIG. 38 shows a chair frame to be upholstered on the seat and back.

To prepare the chair for upholstering, in the back space two fillets of wood (deal), about $\frac{3}{4}$ in. square in section, are fixed inside on the uprights with screws or nails. These are for tacking the stuff to. On the seat rails pieces of 1-in. square-section deal are nailed, as seen in Fig. 39. This is to save building up firm stuffed edges having two or three rows of stitching.

Webbing.—The next thing is to web the rails on the under edges, for which the chair must be turned upside down on the bench, as in Fig. 40. A common but strong web is used, fixed with the $\frac{1}{8}$ -in. webbing tacks. Three are put on from back to front and two across for the present. More may be put on to make a stronger bottom, either now or at the finish, before putting on the bottom cover. These seats are often made up, having one spring only (7 in. "hard") in the centre, sometimes two springs. Three or four "soft" springs, however, are better; in this case three medium 7-in. springs being used, stitched in position as shown in Fig. 41.

Canvassing.—A piece of spring canvas is now cut to stretch over the seat, allowing 3 in. or 4 in. over at the front and sides. At the back edge it is



Fig. 38.—Frame for Common Spring-seat Chair.

doubled over and tacked first, then at the front and each side alternately. The springs should be upright in order to be stitched to the canvas, as seen in Fig. 42.

The front and side edges are then string-looped,

SPRING-SEAT DRAWING-ROOM CHAIR 47

but not so loosely as previously described; just sufficiently taut to allow for packing under some white cotton flock in the manner shown by Fig. 43.

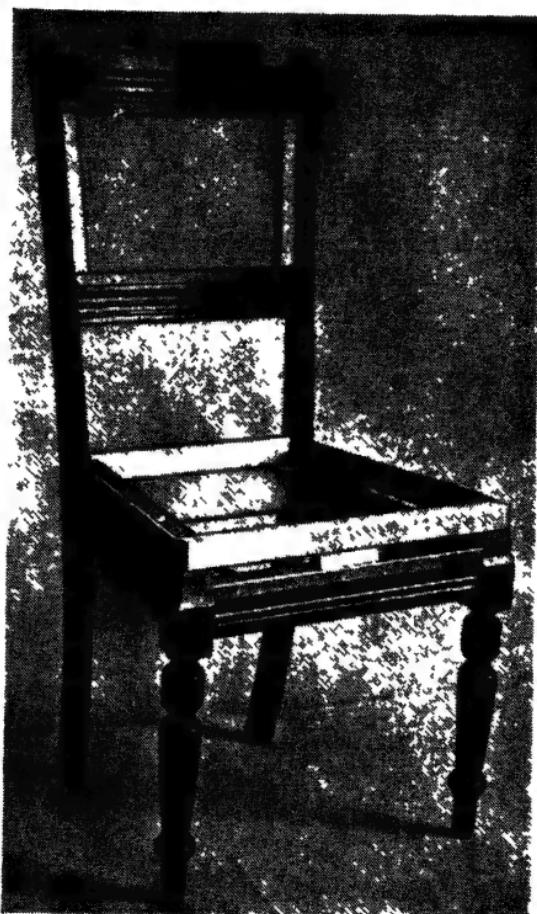


Fig. 39.—Showing Seat and Back Prepared for Upholstering.

The canvas is then pressed tightly over the flock, doubled in and fixed with more $\frac{1}{8}$ -in. tacks. The result should be a firm roll, as will be seen on reference to Fig. 44.

UPHOLSTERY

Stuffing.—It is now ready for the main stuffing, which consists of $2\frac{1}{2}$ lb. of grey flock (rag flock),

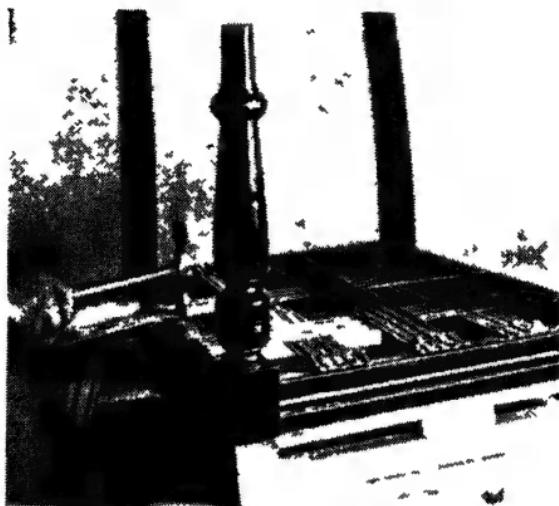


Fig. 40.—Webbing Seat Frame on Under Side.



Fig. 41.—Showing Springs Stitched in Position.

which must be packed on evenly, using judgment to form a well-shaped seat. There is no under-cover

nor wadding used on this seat ; just the final cover of Rexine 23 in. square, worked on smooth and even.

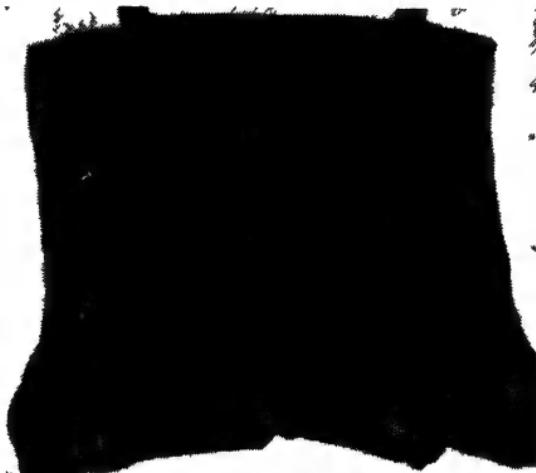


Fig. 42.—Spring Canvas in Position.

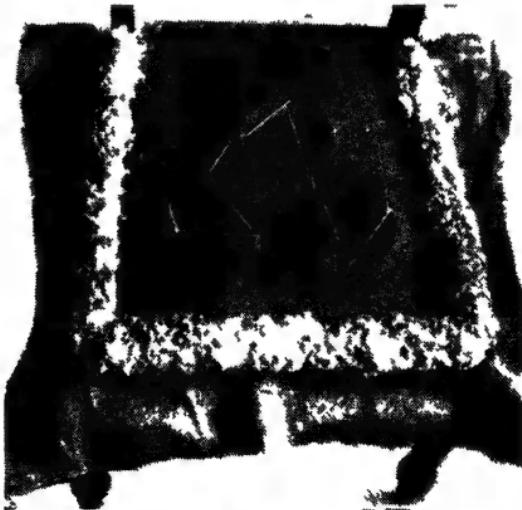


Fig. 43.—Forming Stuffed "Roll" with Cotton Flock.

The Back Panel.—The back panel is simply covered with a piece of spring canvas, doubled in on the edges and fixed with $\frac{1}{2}$ -in. tacks, to be stuffed

UPHOLSTERY

with $\frac{1}{2}$ lb. of wood fibre and covered with a piece of soft canvas. The side edges are to be stitched

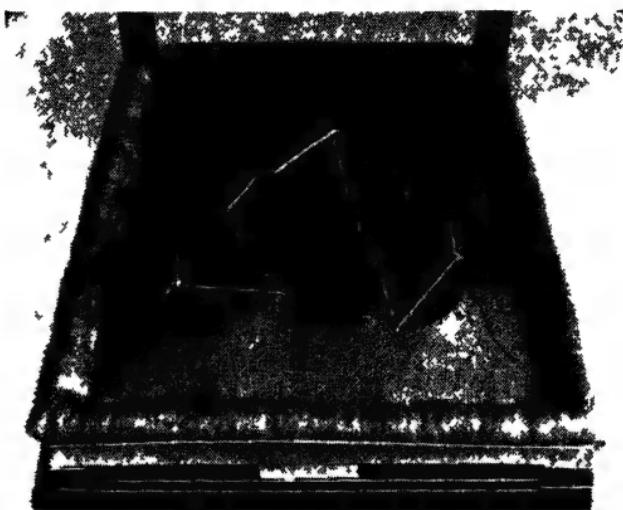


Fig. 44.—Stuffed "Roll" Formed.



Fig. 45.—Chair Back "First Stuffed."

with the curved needle to form a simple roll, which makes the curve in the back more pronounced (see Fig. 45). A thin layer of the flock is then spread

SPRING-SEAT DRAWING-ROOM CHAIR 51

over and the final cover of Rexine fixed. The outside back, also, is panelled with Rexine, and all tacked edges are covered with banding and studs to match.



Fig. 46.—Chair Completely Upholstered.

The Bottom Cover.—The bottom cover of canvas can now be put on with $\frac{1}{2}$ in. tacks, and a pair of castors on the front legs. A final polish up completes the chair (*see Fig. 46*).

CHAPTER VII

Chairs with Loose Lift-off Seats

CHAIRS with loose lift-off seats are convenient in many ways: to make, to upholster, to polish, to repair, or to clean. They have a good neat appearance and are economical.

As regards the upholstery work, it is usually simple in character. Sometimes it is practically pin-cushion upholstery, as in the case of many of the sets of inexpensive dining-room or living-room chairs, also the modern Jacobean and Queen Anne chairs, and even in the reproductions of the Heppelwhite and Chippendale styles. Of course, the quality of materials and fineness of workmanship should always be in accordance with the class of furniture.

Loose-seat Queen Anne Chair.—An example of a modern Queen Anne chair is shown by Fig. 47. This style is always popular and in great demand. Such are really dining-room chairs, and are usually made in sets of from six to twelve pieces, including one or two arm-chairs or "carvers." But in most cases they are now supplied as a complete suite in company with a Chesterfield settee and pair of divan easy chairs.

The loose seat frame is of birch, of $2\frac{1}{4}$ in. by $\frac{7}{8}$ in.

section, fitted neatly in the seat frame, the rails of which are rebated to receive it, and the first consideration in upholstering is the kind of material to be used for covering, so that the frame may be reduced



Fig. 47.—A Medium-class Modern Queen Anne Chair in Pincushion Loose-seat.

a little all round, just enough to get a close fit without forcing. This particular chair is shown, with the seat out, in Fig. 48, wherein is seen English web used and black linen.

The rebate of the seat rails is from $\frac{1}{2}$ in. to $\frac{5}{8}$ in. deep, so the upper edge of the loose frame is bevelled to it, the inner corners being rounded off to avoid cutting the webbing.

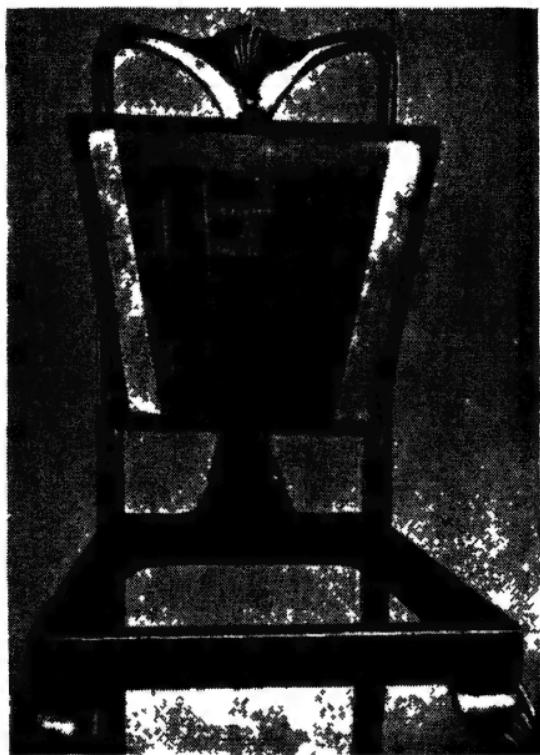


Fig. 48.—Showing Loose Lift-out Seat.

These seats are lightly stuffed with little more than $\frac{1}{2}$ lb. of curled horsehair, packed evenly on under loops of thin twine, simply covered with two layers of wadding, and the velvet, which is fixed with $\frac{3}{8}$ -in. tacks on the under side of the frame (see Fig. 49).

Another Style of Loose-seat Chair.—Another kind of chair frame for loose-seat upholstery is shown

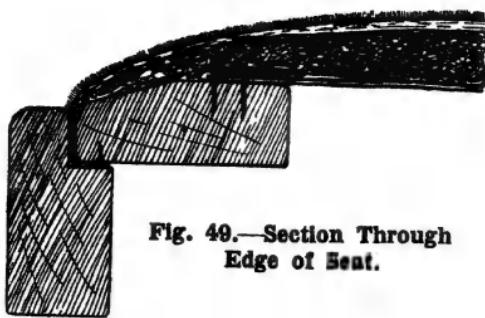


Fig. 49.—Section Through Edge of Seat.

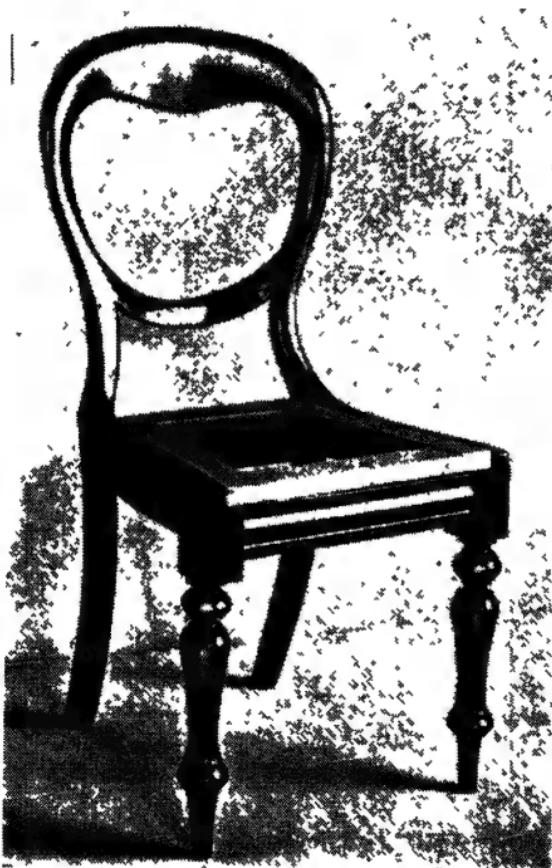


Fig. 50.—Chair Frame of Another Type with Loose Seat.

10
U.S. LIBRARY

by Fig. 50. But this does not fit in rebates, it rests on flush with the face sides of the front and back rails.

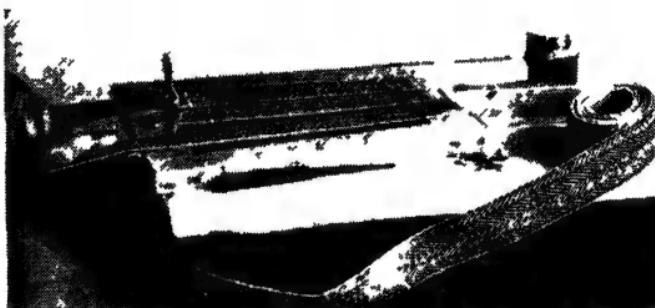


Fig. 51.—Webbing Loose-seat Frame.

The method of webbing the frame is shown by Fig. 51, note the wood hook fixed on the bench top to keep the frame from tilting. The web is on two



Fig. 52.—Seat in Place Stuffed and Covered in Serim.

3-in. wire nails driven 1 in. into the bench top, this being convenient for retaining the web for unwinding. It is a small bench, the top being covered with calico, as in final covering the seat is turned face downwards.

Webbing.—The $\frac{1}{2}$ -in. tacks may be used for webbing and the cover of canvas, the frame being then string-looped and stuffed with from $\frac{3}{4}$ lb. to 1 lb.

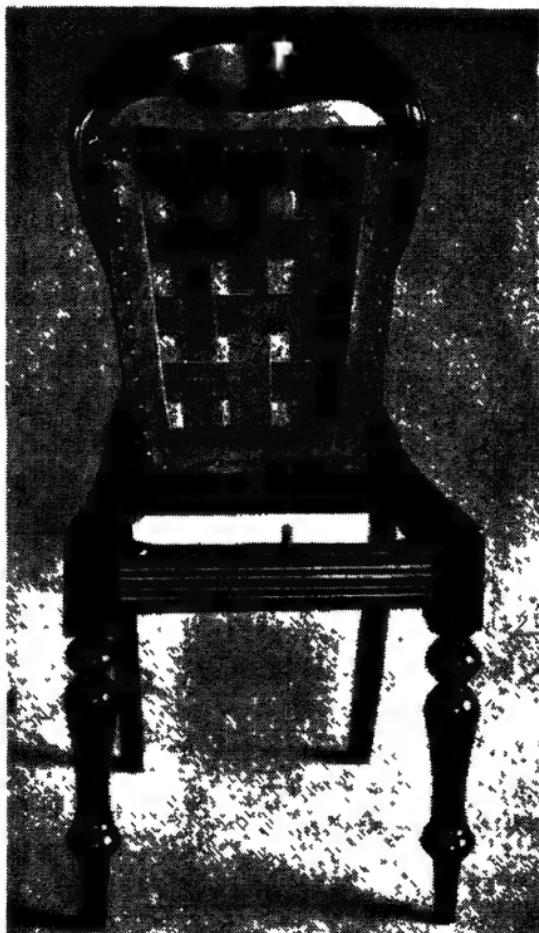


Fig. 53.—Showing Under View of Finished Lift-Out Seat

of curled horsehair, to be covered with scrim tacked on the edges, as in Fig. 52. One layer of wadding is then put on, and then the final cover of leather-clot (see Figs. 53 and 54).

This chair seat when in place has its front and back edges exposed, and there is another type with all four edges fully shown. These are usually more

heavily stuffed, sometimes having one or two rows of stitching on the front and side edges, and a fillet of wood at the back edge as a substitute. Although there are a great many of these in use, needing re-upholstering, there are not many being made now.

Stuffing.—

Loose seats are often stuffed with white cotton flock or rag flock, for

the sake of cheapness; but whereas it generally goes dense and flat after a year or two in use, the curled-hair stuffing will give more comfort and keep good shape for a dozen years or more.

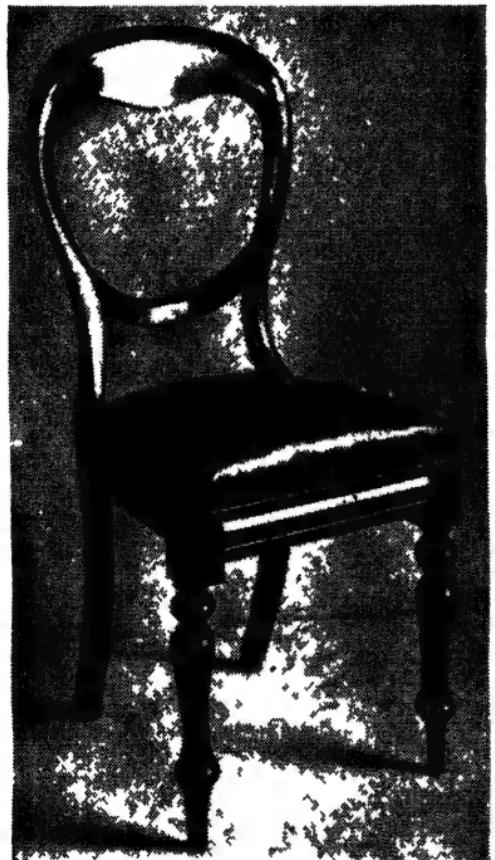


Fig. 54.—Loose-seat Chair Complete.

CHAPTER VIII

"Show Wood" Easy Chair

FIGS. 55 and 56 show the frame prepared with common wood for the stuffed work. In the back space it is $\frac{7}{8}$ in. in section fixed with $1\frac{1}{2}$ -in. wire nails. On the front and side seat rails it is $1\frac{1}{2}$ in. by 1 in.; and pieces 4 in. square by $\frac{1}{2}$ in. thick are nailed on the inner side across the joints on the rails and arm uprights to give extra support to the dowels, as these often get broken. On the arms pieces of $\frac{3}{4}$ in. section are nailed on the outer side level with the upper side.

Stuffing.—To commence the stuffed work, the back space is covered with canvas on the inner side, stretched tight in the length first, but across it is left to conform with the slight hollow of the rails. It is doubled over on the edges and fixed with $\frac{1}{2}$ -in. tacks about $1\frac{1}{2}$ in. apart.

To make the firm, shapely edge at the upper part, a first stuffing must be made. This requires a piece of canvas 20 in. by 10 in., one long edge to be doubled in and stitched to the back canvas at about 4 in. from the top edge. Then $\frac{1}{2}$ lb. of hair or fibre is packed on and covered over, the canvas edge to be turned in and tacked $\frac{1}{2}$ in. in from the polished

wood. This is regulated into shape and given two rows of stitching, done with the circular stitching needle. The back canvas is then string-looped for packing on the main stuffing of 7 lb. of grey flock (see Fig. 57).



Fig. 55.—Framework of Easy Chair to be Upholstered.

The flock is packed fuller at the lower part of the seat, so that when covered by the Rexine, 30 in. by 21 in., it has a swell at that part, but gets slightly hollow at the centre of the back. At the lower edge it must be pulled through and tacked at the back

of the rail. The top corners need to be neatly pleated in, and the tacked edges covered by the banding and studs, as this is easier to get at before the other parts are done. It is shown at this stage of the work by Fig. 58.



Fig. 56.—Chair Frame Prepared with Common Wood for Stuffing

The Arms.—The chair arms require about $\frac{3}{4}$ lb. of hair or fibre divided between them for the first stuffings, and each requires a piece of cheap canvas 15 in. by 8 in. They are often stuffed in the same manner as is usual for a couch back rail; but

chair arms come in for much more handling, and generally get loose and wobbly. Therefore it is better to string-loop them and pack the stuffing firmly on, covering with the canvas doubled in on the edges, to be fixed with $\frac{1}{2}$ -in. tacks inserted in the



Fig. 57.—Showing Chair Back Ready for Main Stuffing.

top corner edges about 1 in. apart. A row of stitching is then done to form a "roll" along each side, and a little second stuffing of soft flock is added, to be covered with sheet wadding. This is shown by Fig. 59.

The chair's left arm-pad is ready for covering with the rexine 14 in. by $8\frac{1}{2}$ in., neatly pleated at the four corners. Both arms may be done and finished off with the banding and studs. They



Fig. 58.—Chair with Upholstered Back Complete.

are shown in Fig. 60, which also shows the chair seat in progress. It has been webbed three each way on the under side of the rails and the fine springs stitched in position. The striped web is used.

The Springs.—In Fig. 61 is seen the spring

canvas fixed over and stitched to the springs, also the "roll" being formed from the arm upright. It is being stuffed with white cotton flock.



Fig. 59.—Chair Arms at Two Processes of Stuffing.

Stuffing and Covering the Seat.—When this is done the seat is ready for the chief stuffing of 8 lb.

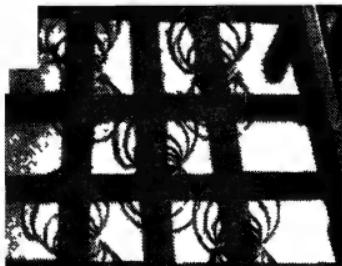


Fig. 60.—Arms Upholstered, Seat Webbed and Sprung.

of grey flock, to be judiciously packed on and fuller at the front part. The rexine cover for this must measure 32 in. by 32 in. It is marked at the centre

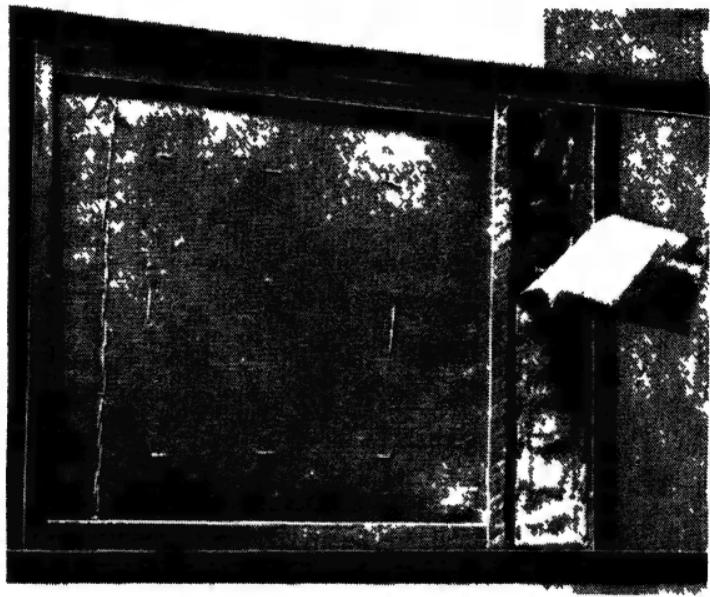


Fig. 61 (*above*) — Springs Covered and Stitched,
and Forming "Roll" Edge.

Fig. 62 (*right*) — Details of Back Work.



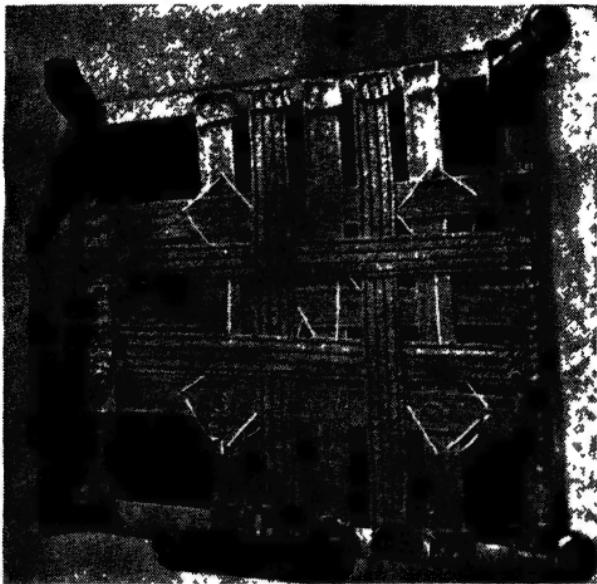


Fig. 64.—Bottom Extra Webbed.



Fig. 63.—Ordinary Webbed Bottom.

of the front and back edges to correspond with central marks on the seat rails to get it on true, and is temporarily tacked approximately to the correct position to cut carefully for clearing the arm and back upright

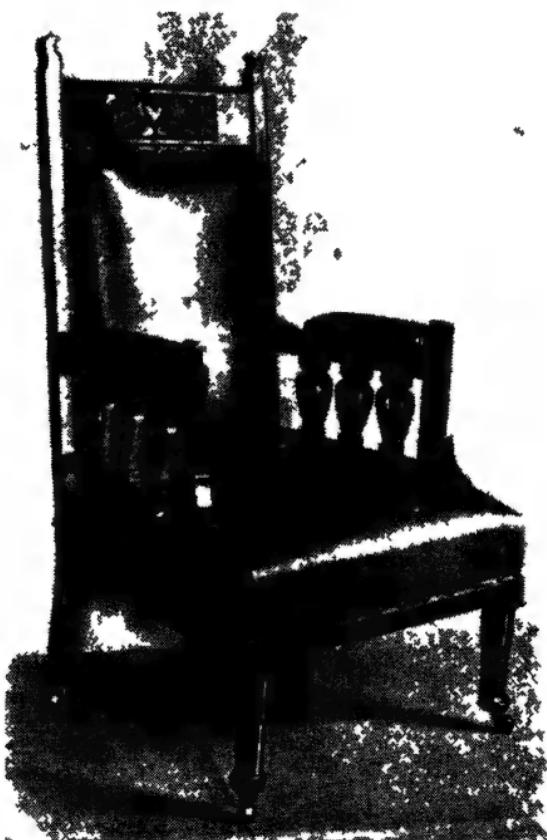


Fig. 65.—Easy Chair Completely Upholstered.

Then it may be gradually worked down to the correct shape, tacking at each side alternately. The corners are finished off in a neat single pleat. The back edge is tacked at the back of the lower back rail, and the space between the two rails filled up

with stuffing, to be retained by a piece of canvas tacked over, these details being shown in Fig. 62.

Covering the Back.—The complete back can now be covered by a piece of the rexine, and the remaining tacked edges finished with the banding and studs ; but before this is done, in this particular case it is better to extra web the bottom. The factory method is shown by Fig. 63. The same extra webbed is seen in Fig. 64.

In putting on the back rexine cover, the lower edge has to be tacked on the back seat rail. The bottom canvas cover can then be put on, and the castors, which complete the chair, as shown by Fig. 65.

CHAPTER IX

Stuff-over Easy Chair

IT is the purpose of this chapter to describe an easy chair of the fully-sprung type which is particularly in favour at present, and likely to remain so. There

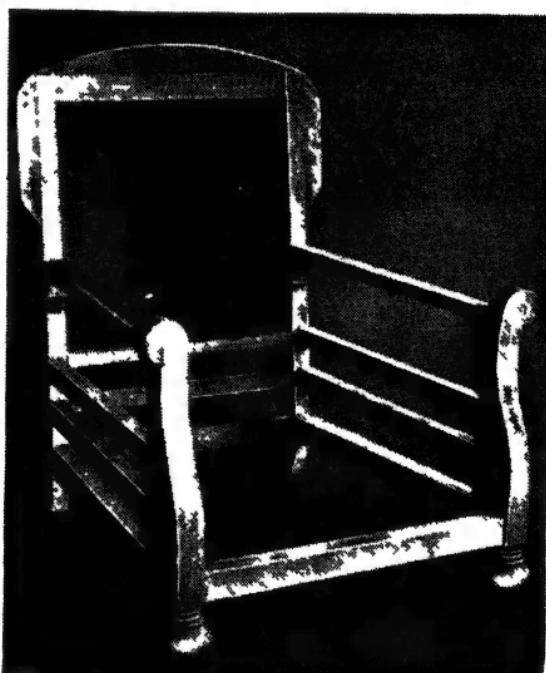


Fig. 66.—Frame for Stuff-over Fully-sprung Chair.

are various styles in stuff-over easy chairs, and the methods of upholstering vary accordingly ; but in any case different upholsterers practise different methods, according to their own special conditions.

The chair to be described is chosen as being one of the most generally popular, and the work of upholstering is done in a way most usually practised. It is of medium dimensions, but these may be increased if intended for use in large rooms or by large persons.

The framework is shown by Fig. 66.

The method of doing the upholstery work most commonly practised is to get the arms and back stuffed up ready for the covers before commencing. Another method is here shown, which may be followed as occasion requires, and is preferred by some practical "stuffers." The arms, back and seat are worked up together in their various processes. The photograph (Fig. 67) shows the first, the webbing completed. No. 12 English web is used, fixed with the $\frac{1}{8}$ -in. webbing tacks. On the inner side of the front seat rail a length of wood is fixed, increasing the width of the rail, as this chair is to have a sprung edge.

Springs.—There are thirty springs in this chair. For the seat, nine 10-in. by No. 8 gauge; for the front edge, four 7-in. by No. 9; for the back, nine 6-in. by No. 12; for the arms, eight 4-in. by No. 12, four for each.

The 10-in. springs are first set out in order on the webbed bottom, the lower coils about 3 in. from the front rail, and 1 in. apart; the others, also, about 1 in. from touching. They are stitched to the webbing in the usual way with the packing needle and twine,

three stitches to each spring. Then the four 7-in. springs are set on the front rail in correct order, about 1 in. from the arm uprights, and fixed by tacking a length of web over the lower coils, a number of the



Fig. 67.—Chair Frame Fully Webbed.

$\frac{5}{8}$ -in. webbing tacks being inserted close against the coil to keep them quite steady.

A length of pliable rattan cane is next required, to be fixed across the front with wire nails to the uprights at 4 in. above the rail. Four pieces of

web are now cut 9 in. long, to be doubled lengthwise and passed through the middle coil of each spring to pull it forward to the cane, the two ends of the web to be fixed with tacks to the front of the rail.

The four springs to each arm are fixed on the wooden rails with web and tacks, similar to the front rail. The nine 6-in. springs are set out on the back webbing, placed about $1\frac{1}{2}$ in. from the upper rail edge, $2\frac{1}{2}$ in. from the lower rail, and the same from the uprights. When stitched to the web the chair is as shown by Fig. 68.

The next thing is to lash the top coil of the front edge springs firmly on to the cane with strong thin twine. Pieces of web are tacked over the ends of the cane to keep it from breaking away. Then the seat and back springs are lashed across in the usual way with the strong spring twine, but to the third coil from the top. The arm springs are done the same with one string only. These details will be seen in Figs. 69 and 70.

Canvas Covers for the Springs.—And now the covers of spring canvas can be cut: for the seat, 36 in. from back to front by 33 in. across; for the back, 27 in. by 27 in. The arms require two pieces 22 in. by 8 in. for covering the webbing and two pieces 24 in. by 12 in. for covering the springs.

Seat Canvas.—The seat canvas is tacked along the front rail and stretched over, pulling down the springs to a little higher than the front edge springs, and it is tacked on the lowest back seat rail. At

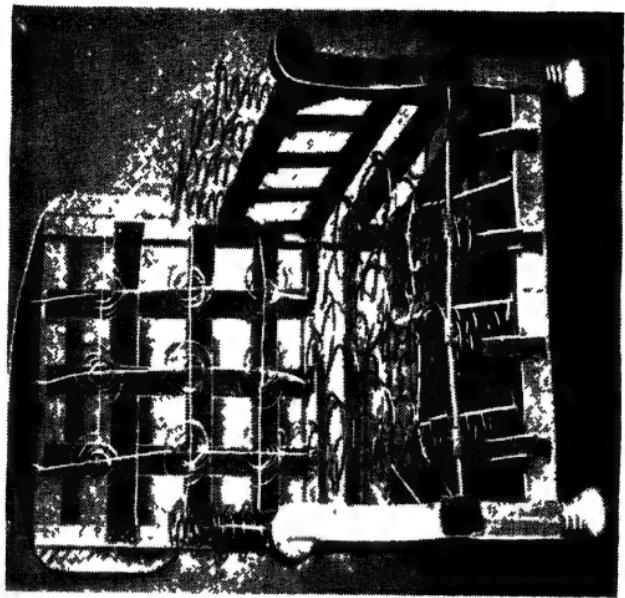


Fig. 68.—Chair with Springs Fixed in Position,
and Cane for Seat Sprung Edge.

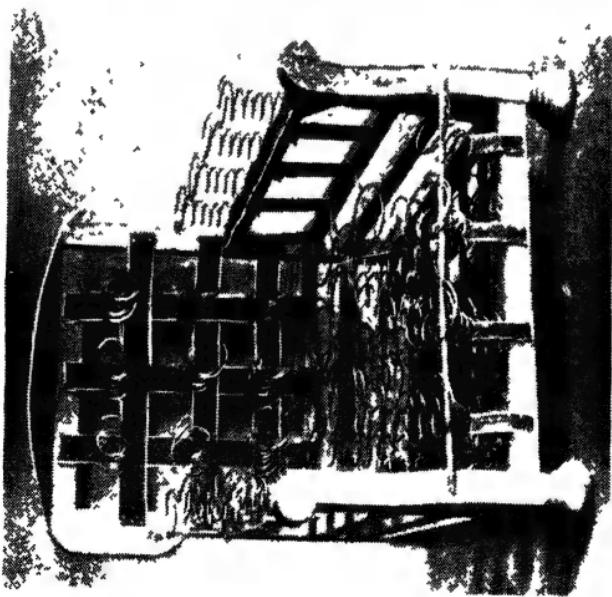


Fig. 69.—Cane Secured at Ends and Lashed to
Springs; other Springs Cross-lashed.

the sides also the canvas is pulled down fairly tight and tacked on the lowest rails. It is then stitched along over the cane, and the springs are stitched in.

Back Canvas.—On the back the canvas is doubled over about 1 in., to be first tacked along on the front of the third rail, using $\frac{1}{2}$ -in. tacks about 1 in. apart, then drawn over, doubled and tacked similarly to the top rail and the uprights. It has to be cut to fit just at the arm rails, and this small space should not be entirely tacked up ; it is left for pulling through a little of the final arm cover.

In covering the arm springs, they are pulled down to about $2\frac{1}{2}$ in., the canvas being doubled on the edges and tacked along the arm rail and on the top end of the scroll. Both back and arm springs are stitched to the canvas the same as the seat. The canvas for the inside arms must be stretched tightly over the webbing, doubling the edges and tacking along the rails and upright, the back edge to be stitched to the web, thus leaving an opening about 1 in. wide. The chair is shown at this stage by Fig. 71.

Stuffing.—The next process is to add the stuffing, for which each part must be string-looped. The arms are to be done first, one at a time, then the back, and then the seat. But the scrim covers for the stuffing may be cut ready : for the seat, 36 in. by 36 in. ; for the back, 36 in. by 36 in. ; for each arm, 30 in. by 27 in.

The first stuffing for all parts is to be of coir

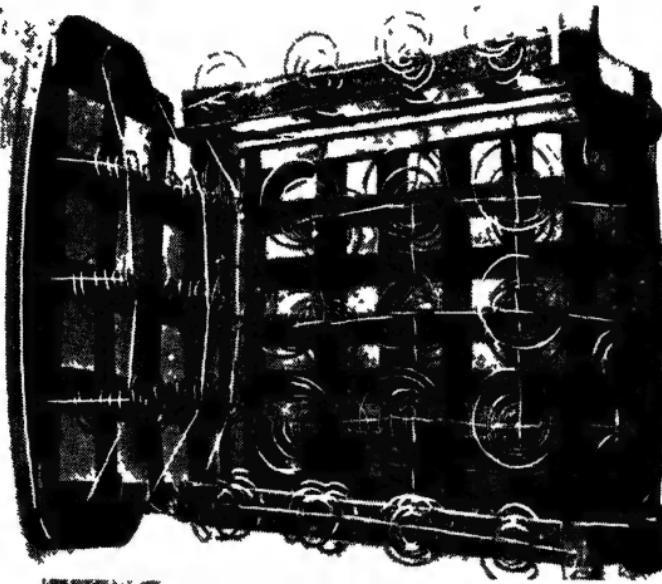


Fig. 70.—Plan of Chair with Springs in Position.



Fig. 71.—Showing Springs Covered with Canvas and Stitched.

fibre, the quantity required being 14 lb.: for the seat, 6 lb.; for the back, 4 lb., for the arms, 4 lb.

When one arm is looped and the 2 lb. of fibre packed evenly on, the scrim cover can be stretched over to be tacked at the outer side of the lower arm rail first, pressing into shape and tacking on the upper arm rail and on the corner edge of the scroll, the scrim being turned in. The back edge of the scrim is pulled through the opening, and need only be tacked temporarily, to the back upright.

When both arms are done, the back can be looped and stuffed first firmly round the outer top and side edges, then filling the inner parts, fullest at the seat, and gradually lessening upwards. Then it is covered by the scrim, tacked at the outer side of the lower back rail (that is, the third rail, counting upwards), and, pressing into shape, tacked on the top and side corner edges, doubling in the scrim, which has to be cut at the arms to pull through at the openings, so that it can be fixed with tacks on the uprights.

Before commencing to stuff the seat the selvedge part of the scrim must be stitched along on the front canvas about 1 in. below the cane, and when the stuffing is packed on the cover is drawn over and cut at the back inner uprights and at the arm uprights for pulling through between the second and third rails at the back and sides to be tacked to the second rails. Some stuffing can be pushed in between the first and second rails so that the arms, back and seat meet closely together at the openings.

Regulating the Stuffing.—The regulator is now brought into use to work the stuffing firmer to the front cane edge, which must be stitched to form a "roll" about $1\frac{1}{2}$ in. in diameter. Also the arms, which will require a row of blind-stitching and a row



Fig. 72.—Chair First Stuffed in Scrim Covers with One Arm not yet Stitched.

of through-stitching to form a roll about $\frac{3}{4}$ in. in diameter. The back may be blind-stitched only on the top and side edges. Fig. 72 shows the chair at this stage of the work, but with one arm before being stitched ; Fig. 73 is a side view.

Fig. 74 shows just how the back should be, and Fig. 75 shows the bottom.

The next thing to do is to put tie stitches through the stuffed back, arms and seat to keep it from shifting between the canvas and scrim, and to pull in any slackness of the latter. The chair is then ready for the second stuffing, which is to be of white cotton flock, the full quantity being 7 lb. ; for the seat, 2 lb. ; for the back, 2 lb. ; for the arms, 2 lb., 1 lb. for each ; and 1 lb. for the front of the seat and arms. Six yards of wadding are to be used over the stuffing, but no calico under-covers, such as are used in better-class hair-stuffed upholstery. So the final covers must be cut ready to put on each part as the flock is packed.

The Covering Material.—In this case the material may be a thin tapestry of Chinese design in pale gold on a black ground. The quantity required is $4\frac{1}{2}$ yd., the width being 50 in. Some judgment is needed to get the design on as symmetrical as may be ; but it is rather a difficult pattern to deal with. The covers may be cut approximately to the sizes : for the back, 40 in. by 36 in. ; for the seat, 36 in. by 33 in. ; for each arm, 30 in. by 27 in. ; for each outside arm 28 in. by 16 in. ; for the outside back, 30 in. by 24 in. ; for the cushion, two sides each 21 in. by 21 in. ; four box pieces (narrow sides for the cushion), 22 in. by 4 in. ; facing piece for front of seat, 24 in. by 7 in. ; two facing pieces for front uprights, each 22 in. by $3\frac{1}{2}$ in. In some cases it is the practice to economise by allowing for "flies" of cheap stuff (black linen) to be sewn on the pulling-through parts which are out of sight at the lower part of the back, the back

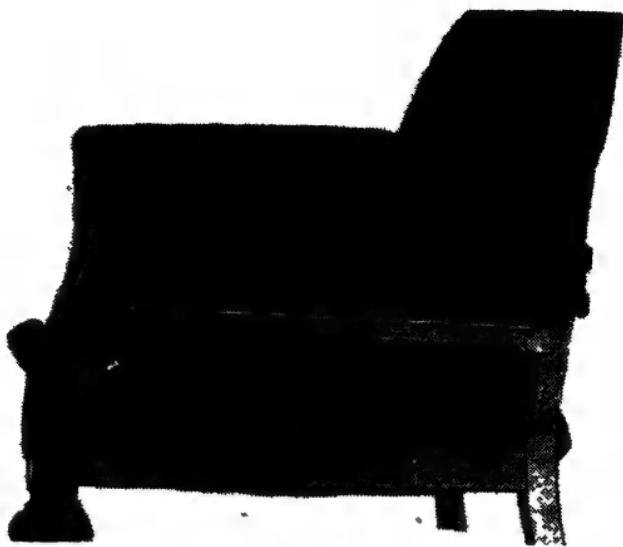


Fig. 73.—Side View.

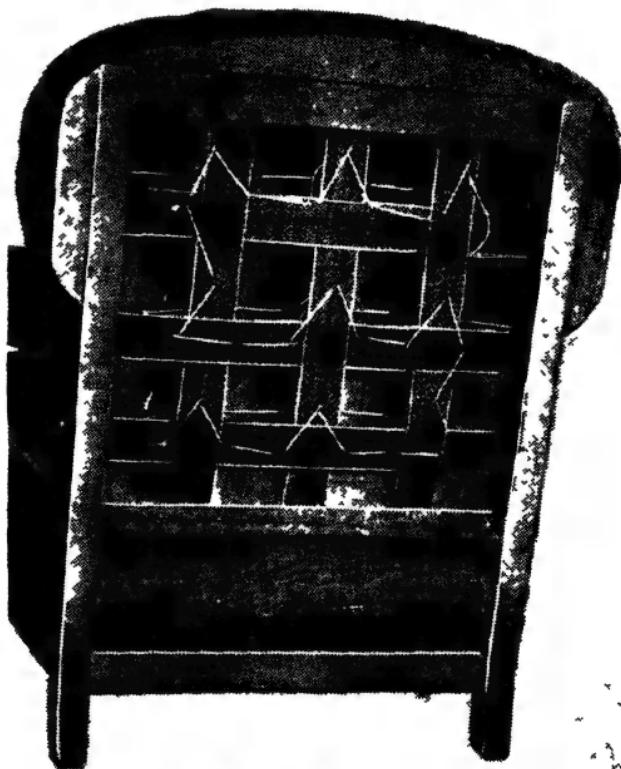


Fig. 74.—Outside Back View of Chair when First Stuffed.

and side edges of the seat, and the lower edges of the arms. Also a plain lining may be used for the part of the seat cover that is hidden by the cushion, and the under side of the cushion itself and three of the narrow sides.

The front edge of the seat cover must be stitched just under the cane. Then the flock may be packed on the seat and covered with wadding and the tapestry drawn over, cut to clear the back and arm uprights, and pulled through.

Cover for the Back.—The cover for the back can be laid in position correct with the seat, the lower edge being pulled through and temporarily fixed with a few partly-driven tacks. It is then drawn off and over the seat, the chair being laid on its back for packing on the flock, as in Fig. 76. When covered with wadding, the tapestry may be fixed over with $\frac{3}{8}$ -in. tacks.

The arms are stuffed and covered the same way, the material being neatly pleated or gathered in, working round the front scrolls. When these are done the facing piece for the seat front should be laid correctly over the “roll” edge, face side on, for back-stitching the edge just under the cane, using the curved needle. It is then as seen in Fig. 77.

Now the chair can be laid on its back for looping and padding the front with flock and wadding, the facing tapestry to be drawn down and tacked on.

Before the two other facings can be done the outside arm covers will have to be put on; but the

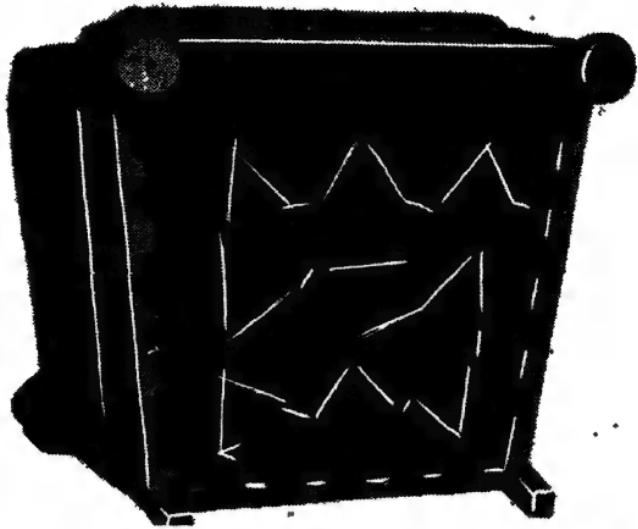


Fig. 75.—Under View of Chair when First Stuffed.



Fig. 76.—Second Stuffing on Back.

spaces between the rails should be filled up level with stuffing, kept in by an under cover of canvas tacked and stretched from the upper arm rail to the lower seat rail and from the front to the back uprights, also tacked along the second and third rails. The tapestry cover must be back-tacked to the arm rail, drawn down and tacked under the seat rail. The two other edges must lap round to be tacked on the front and back of the uprights, so that no tacks are visible.

At the back the spaces between the rails must be filled up and a cover of canvas put on the same way. The tapestry cover also is neatly back-tacked at the top edge, and the lower edge tacked under the seat rail ; but the side edges have to be turned in and neatly sewn along on the corner edges of the chair back.

Now the two front facing pieces can be back-tacked in place along the inner edge of the part to be covered, the flock and wadding to be packed on. Then the tapestry is neatly fixed over.

Decorative Cording.—All the tacked or sewn lines on the front are covered by a decorative cord to match the material. It may be fixed with the fine gimp pins where there is wood to which it may be tacked ; otherwise it must be sewn on by means of the small curved needle and strong thread. The process of finishing the front is shown by Fig. 78.

The Chair Bottom.—The chair bottom requires a cover of black linen, fixed on with $\frac{1}{2}$ -in. tacks about $1\frac{1}{2}$ in. apart, the edges of the stuff being doubled in.

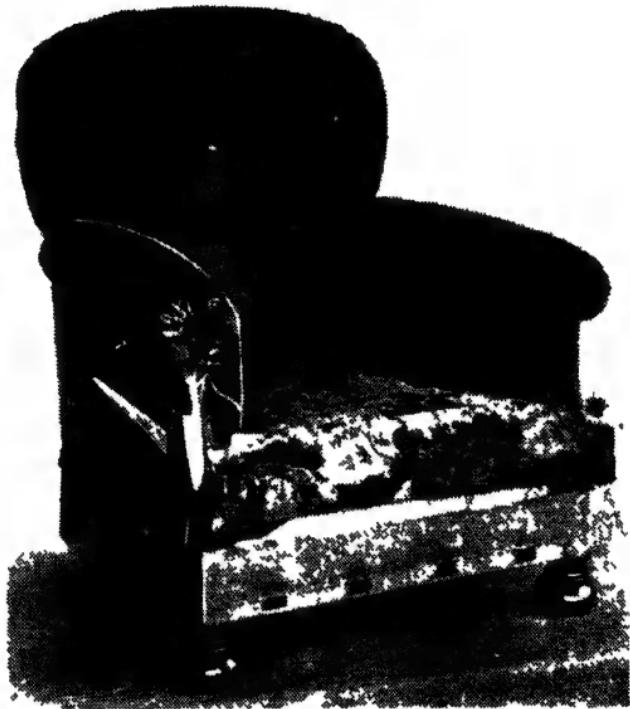


Fig. 77.—Chair with Seat Facing, Ready for Padding with Flock and Wadding.

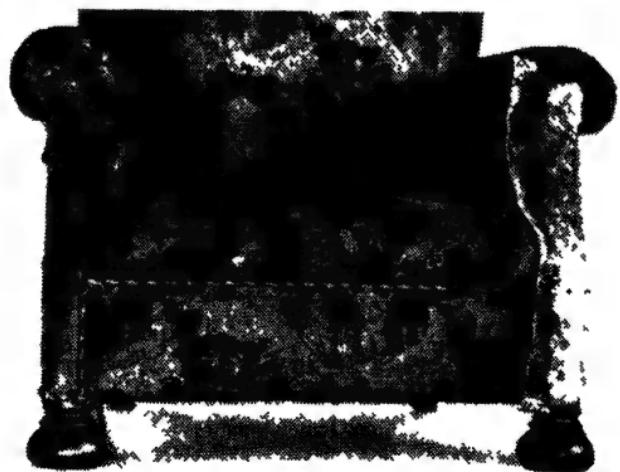


Fig. 78.—Front of Chair in Process of Finishing the Facings.

The Cushion.—This completes the chair except for the cushion. The sizes for the tapestry cover have been given. The parts to be seamed together have a piping at least on the front seams ; the back seam



Fig. 79.—Chair Completed.

should be left open for putting in the filling, for which another case is made in a plain soft cotton material with plain seams. It is made slightly larger than the tapestry case (about $\frac{1}{2}$ in.), and is stuffed with $2\frac{1}{2}$ lb. of down and sewn up, then covered in sheet wadding and put in the case and sewn up. The finished chair is shown by Fig. 79.

CHAPTER X

Footstools

FOOTSTOOLS make good practice for a beginner and are useful articles of furniture, very acceptable as presents and readily saleable as a matter of business. It is usual for the upholsterer to make up his own frames for stools.



Fig. 80.—A Simple Footstool.

The accompanying photograph (Fig. 80) shows a footstool which consists of a piece of deal board 1 ft. square by $\frac{3}{4}$ in. thick, with two battens 1 ft. long by $1\frac{1}{2}$ in. wide nailed on flush with the end edges across the grain, and two battens about 9 in. long, nailed even with the other edges. This makes it about $1\frac{1}{2}$ in. thick all round, the battens being necessary

to support the board from being cracked through and to form a receptacle for the stuffing. The corners of the board and the top corner edges of the battens are well rounded off with the rasp. The four turned feet are of birch, stained and polished, fixed on with 2-in. dowel screws, and glued.

Cutting the Scrim.—A piece of scrim is required 17 in., quite square, and to get this right a thread is drawn out to find the straight edge, to which it is



Fig. 81.—Method of Stuffing Simple Footstool.

cut, and 17 in. from there another thread is drawn out to find the exact cutting line. It is important to the shape that this be cut and put on correctly. Therefore at the centre of each edge of the scrim and the board a mark is made, the scrim being then doubled in about $\frac{1}{2}$ in. and tacked on one edge just above the joint line.

Stuffing.—One and a half pounds of grey flock is packed firmly and evenly on, well pressed with the hands, and the stool is then as shown by Fig. 81.

The scrim is now drawn over to the opposite side to be turned in and tacked, commencing at the centre mark and working towards the corners ; but the stuffing has to be judiciously worked down by pressing over the scrim, and at first the tacks may be temporarily half driven at the upper corner edge of the board. Proceed the same with the two other sides,



Fig. 82.—Regulating the Stuffing through the Scrim.

tacking each alternately. Then press to a better shape, working the scrim down to the tacking line, and retack. Before doubling in the scrim at the corners it may be necessary to stuff in a little more flocks to make them firm and shapely.

Regulating the Stuffing.—The regulator may now be used to even any irregularities of the stuffing, and work it most firmly to the edges, when it will have the appearance shown by Fig. 82.

Fixing the Covering Material.—In putting on, say, a tapestry cover, care should be taken to get the design symmetrical. It is first tacked temporarily and cut to about $\frac{1}{2}$ in. below the wood, to be turned in and tacked permanently. The edges are finished with a gimp to match, and fixed with gimp pins.

Another Style of Footstool.—The photograph (Fig. 83) shows a footstool of better make. For this

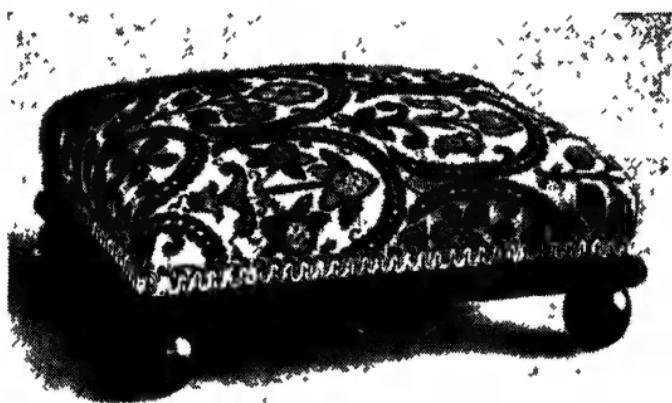


Fig. 83.—Superior Footstool.

the board is 13 in. by 10 in., and a piece of canvas is tacked over the under side, and two battens 10 in. long by 2 in. wide are fixed flush with the end edges. Two other battens about the same length are to be fixed on the side edges. This gives the appearance of an upholstered frame on the under side. A plain rounded mahogany moulding is glued on and secured with fine wire pins, the corners being mitred and slightly rounded off.

The stuffing work on this stool commences rather

FOOTSTOOLS

differently from ordinary procedure. Loops of twine are put on as shown in Fig. 84, and the flocks are packed firmly under, as seen in Fig. 85. When this is done all round, the interior is packed firmly with flocks. The size of the scrim is 19 in. by 15 in. already tacked on the back edge. The rest of the work is the same as described, except that the tacking is done on the corner edge of the board.

Both of these footstools can be made in several smaller sizes, from 9 in. square, and 11 in. by 8 in., to use up smaller material.

The upholstered frames of the stools shown by Figs. 86 and 87 are secured with two screws through the centre of each end rail from underneath (see Fig. 87).

The stuffed work of both these footstools is exactly the same, except that the one shown by Fig. 87 is commenced by covering the space with a piece of strong lining of suitable colour, merely for the sake of the underneath appearance. The frame is shown by Fig. 88.

Webbing.—The webbing used is extra quality wide white with red stripes. Commence by doubling

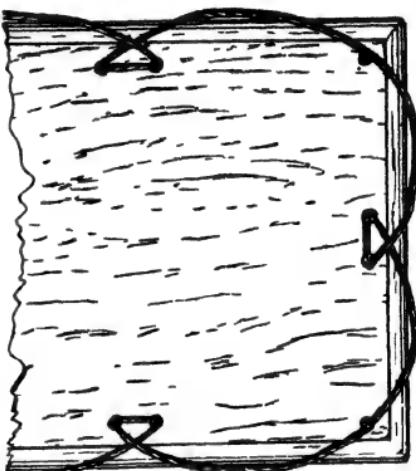


Fig. 84.—String Looped ready for Stuffing Superior Footstool.

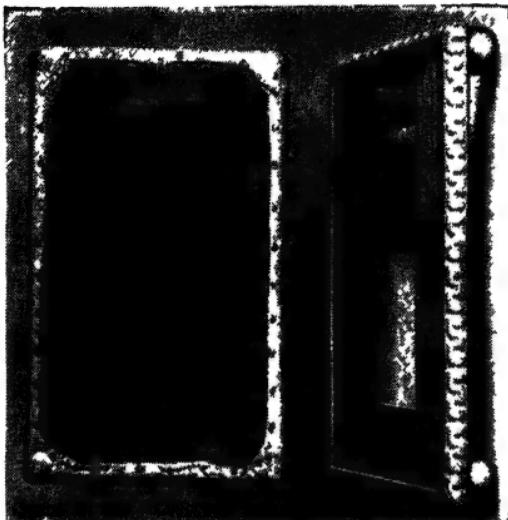


Fig. 87

Fig. 85.—Method of Stuffing Under Loops shown by Fig. 84.

Fig. 86.—Footstool in Needlework.

Fig. 87.—Lift-out Upholstered Frame.



Fig. 86

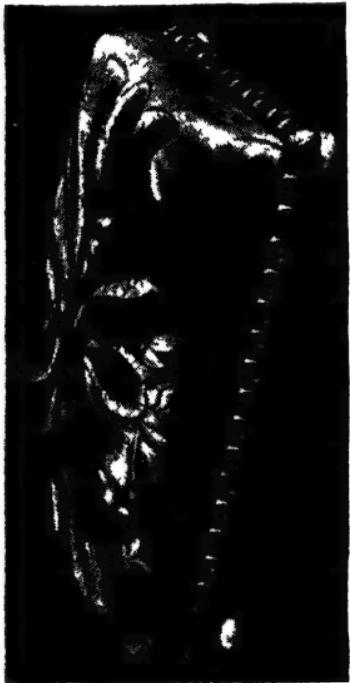


Fig. 86

FIG. 88.—Woodwork of Footstool.



FIG. 88.

FIG. 89.—Webbing the Stuffing Frame.

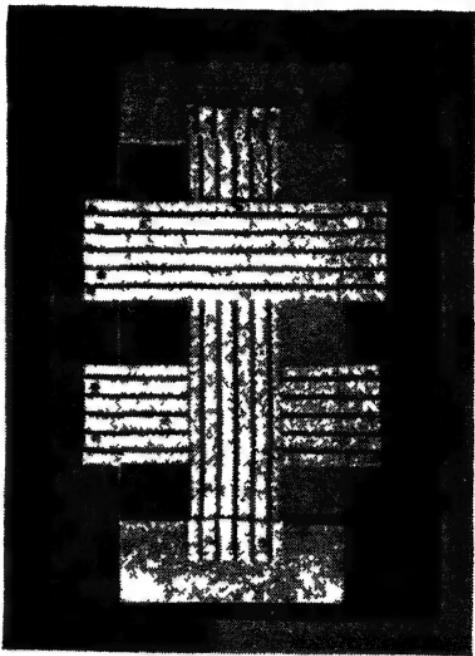


FIG. 90.—Webbing Completed.



FIG. 89.

FIG. 90.

the end over about 1 in. and fix centrally about half-way on one end rail of the frame. There is method in the tacking ; it should not be done indifferently. Five $\frac{1}{2}$ -in. tacks are inserted to fix the doubled end of the web, one central and one at each corner, and two between not in line with the others, the purpose

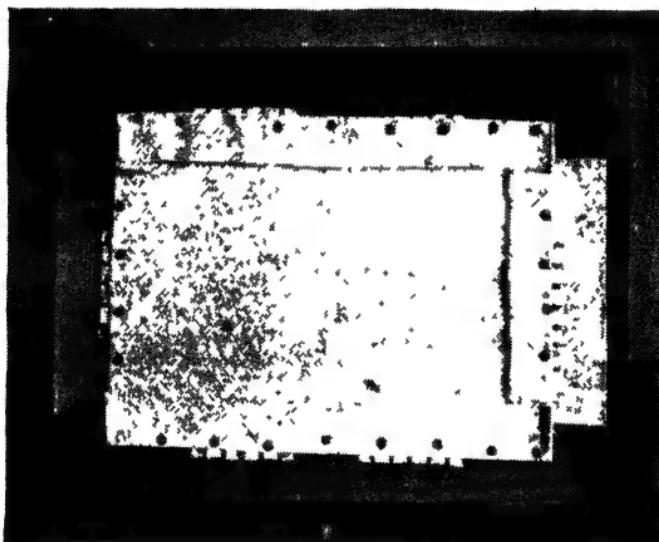


Fig. 91.—Canvas Stretched over Webbing.

being to avoid splitting the wood or weakening the web. It must be stretched as tight as possible without overstraining.

Most upholsterers find an excellent method of straining to be simply a piece of wood used in the manner shown by Fig. 89. The iron plane on the other end is only put on as a weight to keep it from tilting up. Four tacks are inserted, zigzag manner, whilst being held, the web being then cut off, doubled

over and two more tacks inserted. Fig. 90 shows this.

A piece of strong white canvas is then tacked over, stretched and doubled in on the edges, as shown by

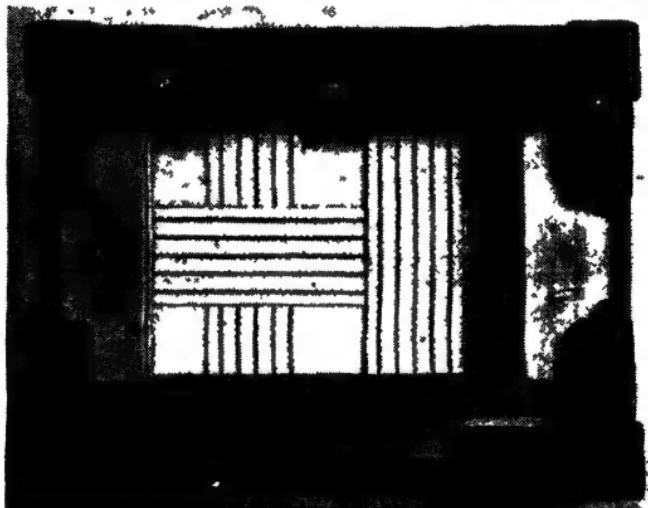


Fig. 92.—Under View of Stool showing Construction.

Fig. 91. In this case there are four screws keeping the stuffing frame in place, as will be seen in Fig. 92, which also shows the feet secured with screws, besides being glued and well glue-blocked.

CHAPTER XI

A Fender Stool and a Pouffe

IN the winter time particularly, in many homes there are frequent complaints against "scratching the fender" by putting the feet on it, especially when the fender happens to be of the kind that is covered with thin sheet brass or copper, which is easily dented



Fig. 93.—Woodwork for Fender Stool.

and damaged. To prevent this happening and to give extra comfort the fender stool is usually adopted.

They are not, as a rule, manufactured in the wholesale factories ; but the retail furnishers, or working cabinetmakers and upholsterers, are often requested to re-upholster them or make them to order. They are, of course, long footstools and can be made after

the same manner as any of the footstools previously described, adapting measurements to meet special requirements. The one to be described here, however, is quite of different construction as regards the woodwork (*see* Fig. 93). It is of antique design, approaching the Chippendale style, and is of first-class workmanship in good quality mahogany, except the upholstery frame, which is of deal.

If the upholstery work has to be in moquette or similar thick material, the stuffing frame is fitted in the rebate allowing $\frac{1}{2}$ -in. space all round. Also the edges are slightly bevelled downwards to ensure an easy neat fit without forcing. This, too, has all corners rasped off and coarse glasspapered.

Webbing and Canvasing.—It is webbed, canvased and stuffed in the same manner as described for the two footstools in Chapter 10, except that it is not stuffed quite so high. No. 12 English web is used in this case and strong fine canvas, and when this is done it will perhaps be found more convenient to do the stuffing work with the frame fixed in place in the rebate.

The Stuffing Frame.—To fix the stuffing frame in place four screw-eyes are inserted, one in each rail at the centre and $\frac{3}{8}$ in. from the rebate, and through these 1-in. screws are driven, the frame being accurately packed in the rebate by pieces of cardboard. A cross mark is made in one end rail of each frame to ensure getting it in right (*see* Figs. 93 and 94).

Stuffing and Stitching.—The quantity of curled

hair for stuffing is $1\frac{1}{2}$ lb., of which about $1\frac{1}{4}$ lb. is used for the first process covered by a scrim cut 36 in. by 16 in., tacked over, doubled in on the edges, "blind-stitched" and "roll" stitched. Then the second stuffing is added, covered by calico cut the same size to be tacked round the edges temporarily, bringing the stuffed work down to the right shape. Then the frame is removed permanently to tack $\frac{3}{8}$ in. on the under edge.

By piercing with a needle through from the top to the webbing, the thickness of the stuffed work should be $2\frac{1}{2}$ in. The calico is covered with two layers of sheet wadding, and the final cover of material put on neat and true. Then it is replaced in the finished polished mahogany frame (*see* Figs. 95 and 96).

A POUFFE

The pouffe, or floor cushion, is much in favour at the present time. It can be used both as a footstool and a seat stool. The work of making it is entirely different from what has previously been described.

The Material : Marking-out.—Fig. 97 shows a pouffe that is made from two pieces of silk tapestry of different design and colours, and a piece of dark red strong curtain material. It is 9 in. high by 16 in. in diameter. The circular pieces of tapestry must be cut quite true or the pouffe will not have a good shape. It should be laid out flat on a board to be lightly fixed with tacks. A pattern of cardboard struck out to a true disc 16 in. in diameter may be

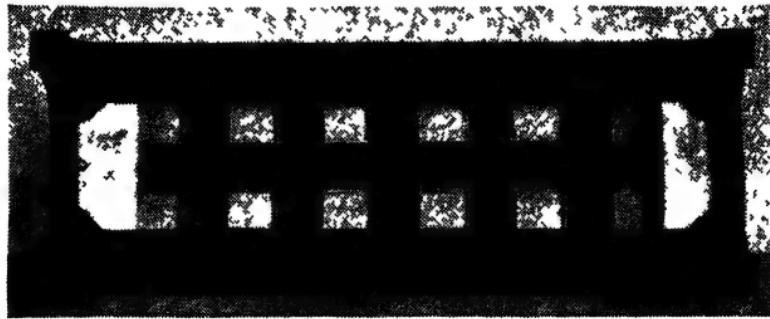


Fig. 94.—Under View of Fender Stool with Stuffing Frame in Place.

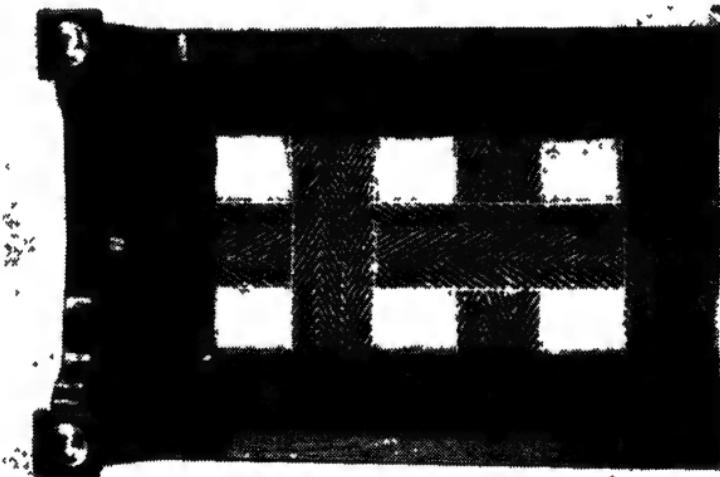


Fig. 95.—Enlarged Under View.



Fig. 96.—Finished Fender Stool.

laid on to get the design of the stuff within the circle as near symmetrical as may be, and it is marked round and cut.

The top and bottom pieces are the same size but may be of different material, so that the pouffe may be used either way up ; that is, when it is intended for use on a clean carpeted floor. In some cases it might be advisable to make the bottom of a strong



Fig. 97.—Pouffe or Floor Cushion in Single Cover.

plain stuff. The right size is 15 in. in diameter ; $\frac{1}{2}$ in. all round has to be allowed for seaming. The border stuff measures 50 in. long by 10 in. wide, allowing $\frac{1}{2}$ in. extra on the edges for seams.

Seaming.—The seaming should be done with sufficient care to avoid getting the circle mis-shapen, as when stuffed the least defect will show. Of course it is sewn together inside out, the ends of the border stuff being left open for about 6 in. in the centre for

filling. It is turned the right way out and stuffed up firmly with between 7 lb. and 8 lb. of soft wool flock. Every care should be taken to get this in evenly and firm all over ; the opening is then stitched up neatly. Then it can be smacked with the hand, and bumped, pressed and stroked to shape.

Next, a piece of strong twine is slip-knotted round

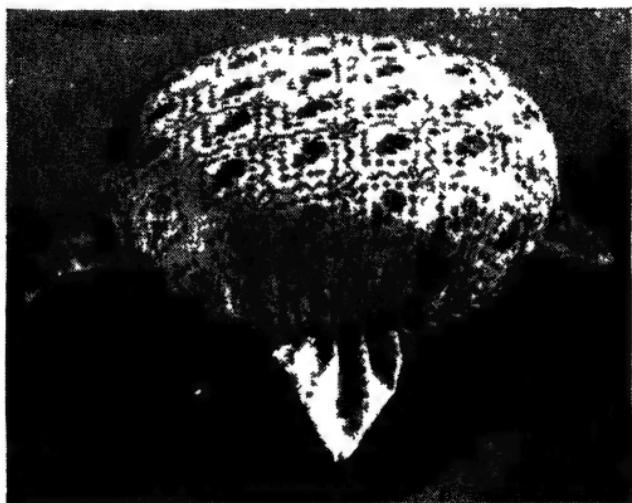


Fig. 98.—Pouffe in Two Covers.

it to pull in at the waist, and helped by striking all round with the edge of the hand to bring it into pleasing shape. It will now be found that the swell in the border has increased the diameter an inch or more.

Cording the Pouffe.—A piece of upholstery cord 3 yd. long is now required. At the centre of this four loops have to be made to come at even distances apart, which will be between 8 in. and 9 in. The loops can be made by putting the cord once round something 2 in. in diameter, such as a cocoa-tin, and stitching

it with strong thread of the same colour. The looped cord is drawn round the waist, the meeting ends to be strongly stitched together. The loops form handles for drawing the pouffe about.*

These pouffes are frequently made in all plain strong poplin, with an independent cover of cretonne, tapestry or velvet, or a mixture of these materials. The photograph (Fig. 98) shows one in half part-silk tapestry and half plush velvet. Both the tapestry and the velvet are 25 in. square, simply seamed together on three edges, the fourth being left open for putting in the stuffed part, which is made exactly the same up to the point of tying in the waist with the twine. The cover is then put on and neatly sewn up. It can be drawn in with a piece of twine to the shape, getting the corners right as lug handles. Then the cord is put round, the parts where the lugs come being slightly untwisted to make an opening to pull them through.

CHAPTER XII

Music Stools

Disadvantage of the Revolving Music Stool.—The revolving, rising, circular-seat music or piano stool,

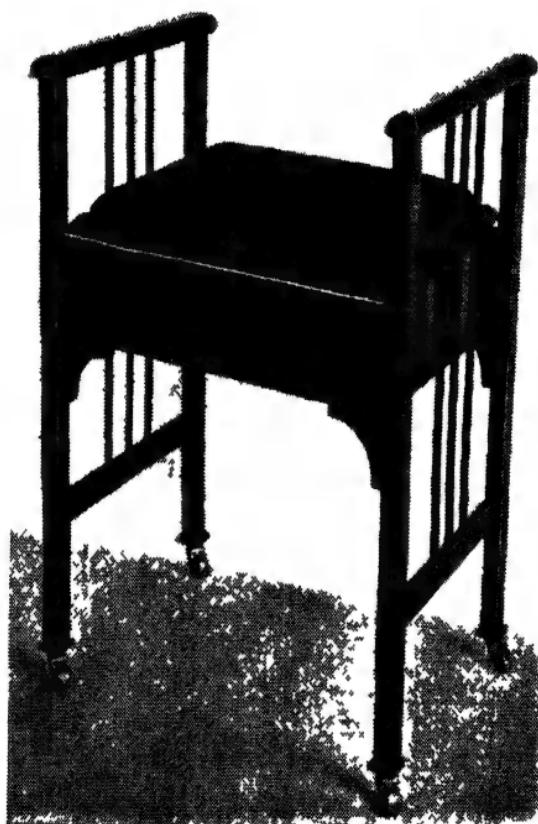


Fig. 99.—Music Stool with Pin-cushion Seat.

which for many years seemed to be the ideal piece of furniture for the purpose, has now practically ceased to be manufactured. It had one particular weakness,

the loosening or breaking of the screw plate at the seat ; also, in a lesser degree, the weakening of the dovetail joints of the legs to the column. Purchasers nowadays almost invariably require the box music-seat.

The Box Music Seat.—The chief advantage of these up-to-date music stools is the capacity for keeping sheet music convenient to hand. They are turned out in considerable numbers by the wholesale furniture factories, made in birch, stained and finished walnut or mahogany colour, and upholstered in velvet, moquette or tapestry ; or they can be obtained “in the white” to be finished as required.

The upholstery work is, in the majority of cases, rather simple in character.

Two designs are here described. Fig. 99 shows a music stool that is upholstered in the pin-cushion style. The stuffed work is of the simplest, consisting of $\frac{3}{4}$ lb. of soft wool flock and a piece of covering velvet 18 in. by 12 in. Covers for two stools can be thus cut from $\frac{1}{2}$ yd. of 24-in.-width velvet. Eight covers could be cut from 1 yd. of the double width 48 in. Webbing and canvas are dispensed with. The cover is fixed on evenly by partly driven tacks along one edge, then the stuffing is packed on evenly and firmly and the cover stretched over and temporarily tacked on all four edges. It is then pressed and stroked out as tight as possible and tacked off permanently. The edges must be trimmed straight to be covered with gimp, the outer edge of which should taper off on to the polished

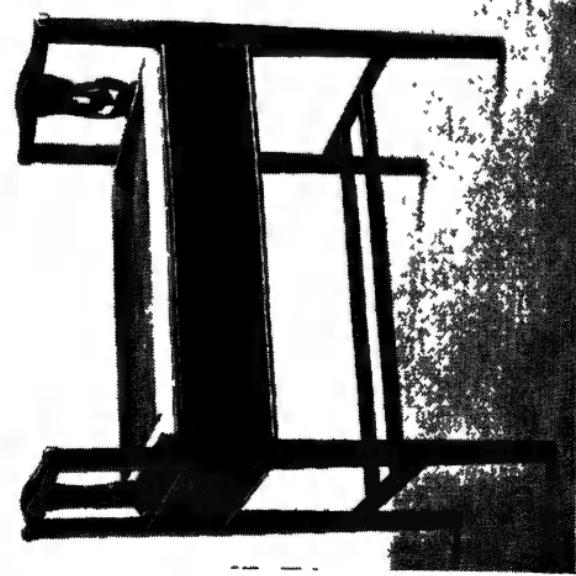


Fig. 101.—Better-class Music Stool with Medium Stuffed Seat.

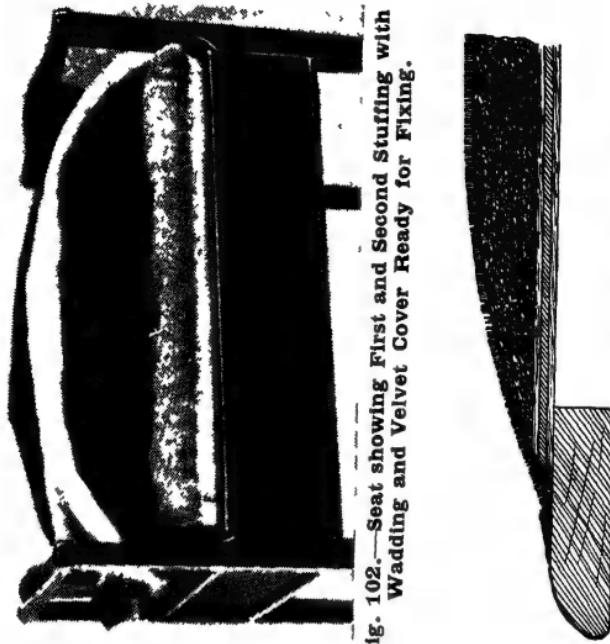


Fig. 102.—Seat showing First and Second Stuffing with Wadding and Velvet Cover Ready for Fixing.

Fig. 100.—Section through Part of Seat.

UPHOLSTERY

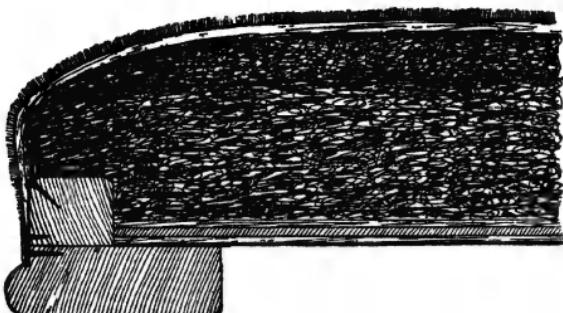


Fig. 103.—
Section Through
Seat.

wood (*see Fig. 100*) ; every tack should be effectually hidden.

Better-class Music Stool.—Fig. 101 shows the frame of a better-class music stool made in walnut and to be upholstered in blue velvet. The upholstery work on this stool is much higher, consisting of two stuffings. On the edges of the upper side of the seat fillets of whitewood are nailed $\frac{3}{4}$ in. by 1 in. section,

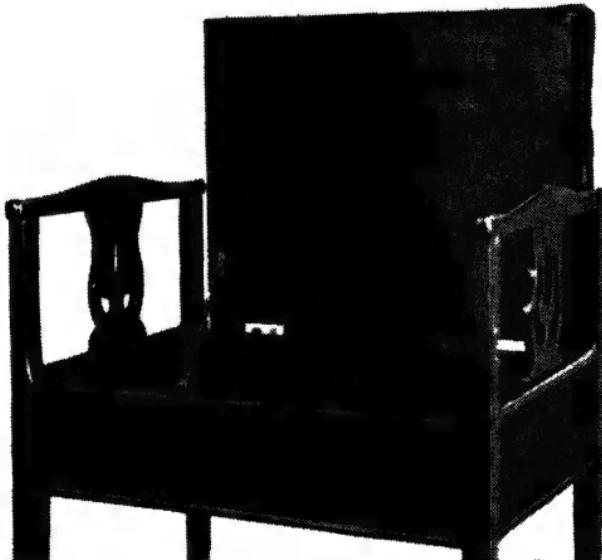


Fig. 104.—Seat-box Lid Open, showing Metal Stay.

intended as substitutes instead of working up a firm stuffed stitched edge, and are to be string-looped for stuffing 1 in. higher, finished. About $2\frac{1}{2}$ lb. of wool flock is packed on, first under the strings as firm as possible. A piece of scrim is required 23 in. by 15 in.,



Fig. 105.—Superior Music Stool Completed.

tacked on one edge and drawn over the stuffing, then temporarily tacked all round, working it down firm and level, the scrim being finally turned in about 1 in. all round and tacked on the corner edge of the whitewood. It should be firm and shapely on the edges and likely to keep so. If it is not so the regulator must be used, and one row of stitching could be done. The

UPHOLSTERY

velvet cover, also, measures 23 in. by 15 in., and is temporarily tacked on one edge. Then a top stuffing of about $\frac{1}{2}$ lb. of curled horse-hair is packed on and covered with two layers of sheet wadding. The photograph (Fig. 102) shows the seat at this stage of the work, with the wadding and velvet cover turned back. When it is worked down to its final shape it will be in section, as shown by Fig. 103. These lift-up seats should always be fitted with a metal arm stay to keep the lid upright when open, as in Fig. 104.

The music stool completed is shown by Fig. 105.

CHAPTER XIII

A Chesterfield

THE work of upholstering a stuff-over settee is regarded as advanced, even for a practical "stuffer," and in first-class work it is carried to a high pitch of excellence. But there are many degrees of work,

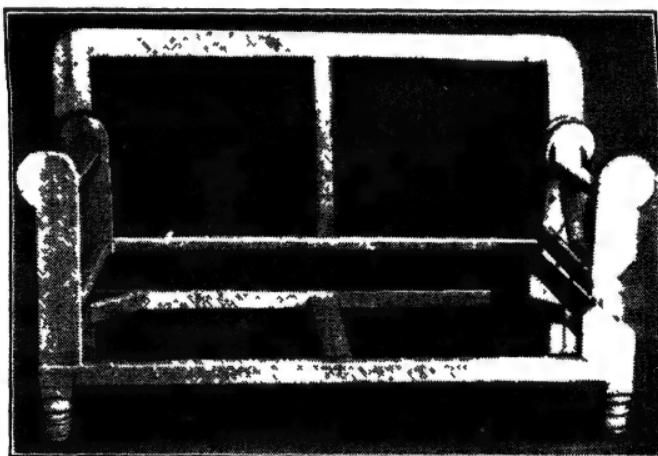


Fig. 106.—Photograph of Chesterfield Frame with Adjustable End.

and any intelligent craftsman who can manage the previous articles of furniture described in this book should be able to make a complete success of such a one as will be here described, which is on rather economical lines, and of the kind that is in great demand.

The framework is shown by Fig. 106.

The Chesterfield described in this chapter is a "straight back."

Webbing.—Before commencing the upholstery all sharp corner edges should be slightly rounded off with the rasp, then the whole frame can be webbed.

Striped web will do for this class of work, the seat being done on the under side, five in the length

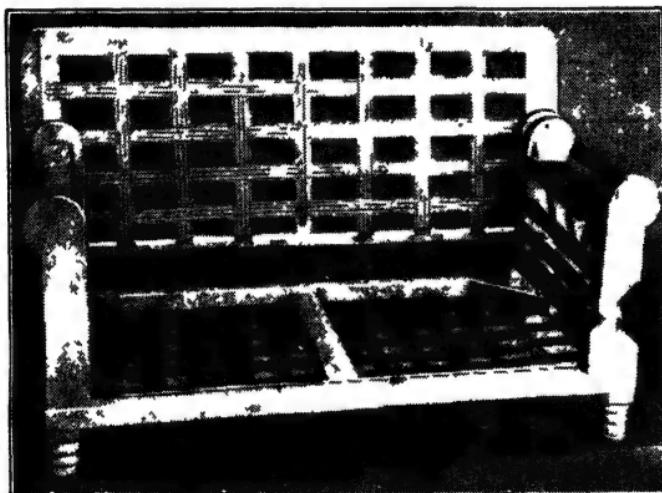


Fig. 107.—Chesterfield Frame Fully Webbed.

and five across each space; also one on the centre rail to fix the long lengths in: $\frac{5}{8}$ -in. webbing tacks are used. The back is to be webbed on the inner side, four in the length and three across each space, with one on the centre bar.

As the arms are to be sprung, a length of wood, 2-in. by 1-in. section, is nailed on the inner edge of the flat rail as a foundation for the springs, and a length of web is stretched across the space below

it and one at the outer side of the scroll. The fully webbed framework is shown by Fig. 107.

Attaching the Springs.—It is now ready for the springs. For the seat one dozen 10 by 8 springs are required, that is, 10 in. high by No. 8 gauge. They are to be set out on the webbing six to each space in two rows, the first to be about 4 in. from the front rail, the other 4 in. behind, placed in regular

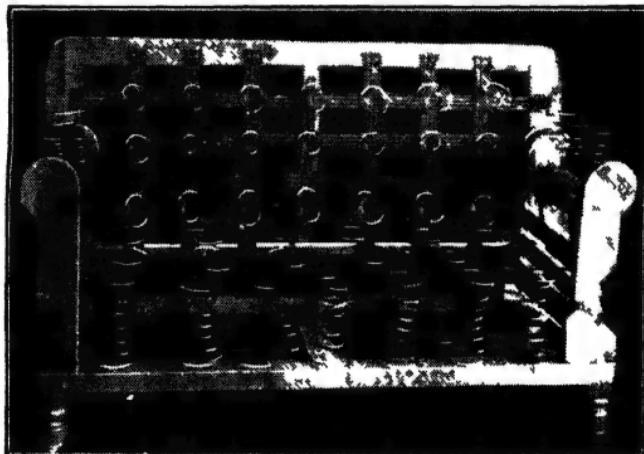


Fig. 108.—Springs Fixed in Position on Seat, Back and Arms of Chesterfield.

order, except that at the adjustable end one of the springs might have to be put a little out of position to keep clear of the ratchet. They are stitched to the webbing in the usual way, and the top coils are to be lashed with spring twine.

The front spring edge requires seven springs 7 by 9, placed in order on the wood rail and fixed by stretching a length of web over the lower coils and securing with tacks. The coil of the centre

spring is allowed to stand forward of the front surface of the rail about $\frac{3}{4}$ in., and the others slightly less, to $\frac{1}{4}$ in. those at the ends.

For the settee back there are twenty-one springs, 6 by 12 in three rows of seven each, stitched and tacked on the centre bar, and the same size springs are used three on each flat rail of each arm, fixed the same as on the seat edge.

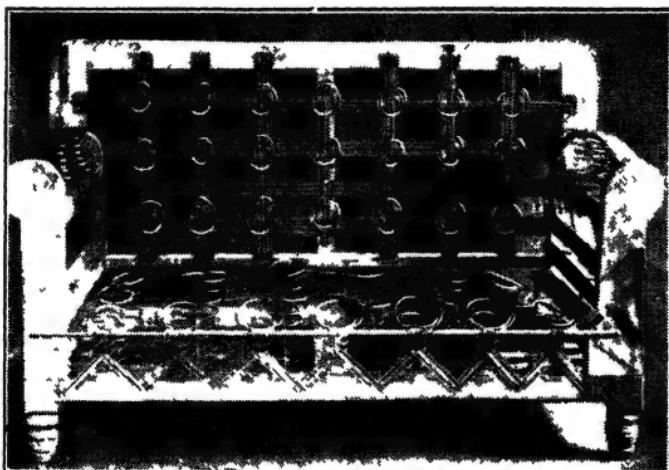


Fig. 109.—Springs of Chesterfield Lashed and Front Edge of Seat Caned.

On the inner side of the arms on the wood rail two springs are fixed, 4 by 12, which completes the number of springs, fifty in all (*see Fig. 108*).

The lashing of the large seat springs and the back springs can now be done, also the inner arm springs; but those on the flat rail are pulled down level with the scroll by having a length of web stretched over them and stitched to it.

The seat-edge springs require to be steadied and

kept forward by a length of doubled web worked on, tacked to the rail and passed through the middle coil of each spring, which pulls them down about $1\frac{1}{2}$ in. lower. A length of flexible rattan cane of about $\frac{5}{8}$ in. diameter is now required to be fixed with wire nails at the ends of the front of the scroll pieces, about 4 in. up from the rail, and the upper coil of the springs must be lashed to this with strong thin twine (*see* Figs. 109 and 110).

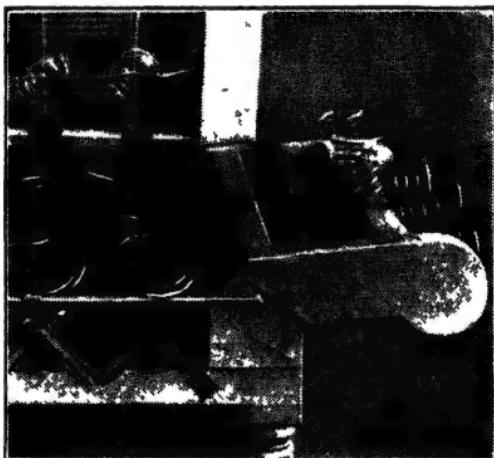


Fig. 110.—Detail of Adjustable End of Chesterfield, Let Down.

Canvasing.—Now the back and arms can be covered with the spring canvas doubled over on the edges and fixed with $\frac{1}{2}$ -in. tacks, and the springs stitched to it. A stronger spring canvas is used for the seat, and it is stitched to the cane and tacked to the seat rails. Care must be taken not to pull in the canvas too much when tacking at the back edge, as it may cause the cane edge to curve inwards. It is best to try to keep it curving slightly

outwards, and the finished result will likely be a straight edge, which is right.

The back, arms, and seat may next be string-looped both round the edges and over the inner parts for packing on the first stuffing.

The settee is shown at this stage by Fig. 111 (*see also* Fig. 112), and further details of the back and bottom may be seen in Figs. 113 and 114.

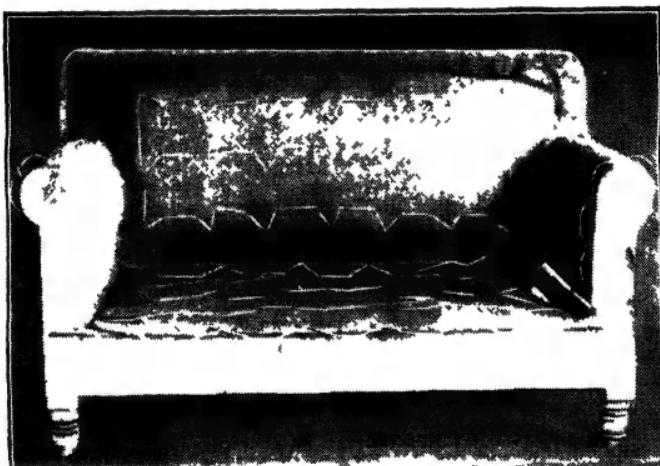


Fig. 111.—Springs Covered with Canvas and Stitched.

Stuffing.—For this class of settee a cheap stuffing is generally used, so the filling may be of coir fibre and white cotton-flock. For this seat about 14 lb. will be required. A piece of scrim must first be cut about 5 ft. long by 3 ft. wide, that is, half of the double width, for the selvedge edge to be stitched along the front just under the cane edge. This is done by means of the curved needle and stitching or carpet thread.

The scrim is now hanging down over the front of the seat and legs, and with the coir packed on,



Fig. 112.—Detail of End of Chesterfield showing String Loops Ready for Stuffing.

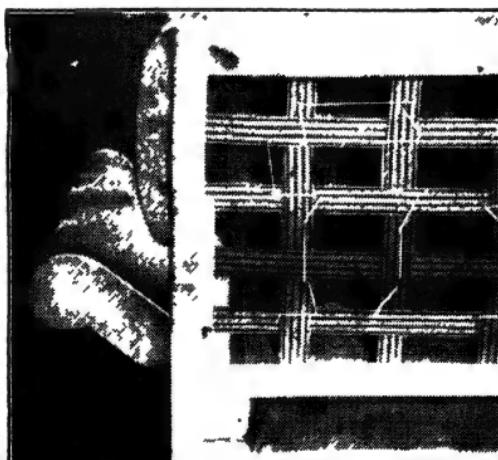


Fig. 113.—Part Back View showing End Partly Let Down.

it is then as shown by Fig. 115, ready for the scrim to be drawn over and tacked at the back seat rail, and at the fixed end seat rail. But at the adjustable

end the scrim is best tacked at the rail just above the seat rail, so as not to interfere with the working of the ratchet. In packing on the coir it is kept firm and well forward over the cane, and in tacking the scrim at the back it is not pulled too much to draw in the front edge, which is afterwards stitched to form a "roll" about $1\frac{1}{2}$ in. in diameter overhanging on the cane. This can be done by one

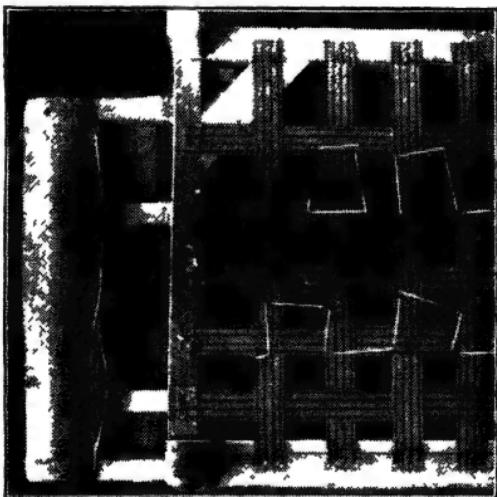


Fig. 114.—Part Under View of Chesterfield, Seat End.

row of through-stitching when the coir is firmly packed, otherwise it should first be blind-stitched.

There is a tendency for the cane sprung-edge to curve inwards slightly, which should be prevented. On looking underneath, the spring-canvas is seen to have slackened a little between the first and second row of springs, and this can be turned to advantage by stitching with the packing needle and strong twine, pulling it down behind the top coils of the first

springs, stitching through the facing canvas close to the wood rail and fixing the twine with a $\frac{5}{8}$ -in. tack. About four stitches 6 in. long through the spring canvas at the centre part of the seat will do in this case.

Then the stuffing will require some regulating through the scrim, and at this stage of the work the settee is shown by Fig. 116.

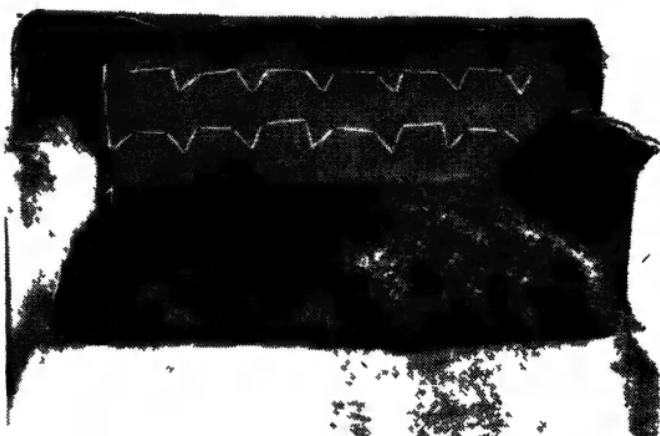


Fig. 115.—Chesterfield Seat with Coir-fibre First-stuffing, and Scrim Stitched at Cane Edge.

Stuffing the Back.—For first-stuffing the back the quantity of coir is 12 lb., covered by a scrim cut 5 ft. 6 in. by 3 ft. It is kept fuller at the lower part, tapering towards the top edge, which is given a row of blind-stitching and a row of through-stitching, the inner part having three rows of the tie-strokes to ensure the stuffing keeping in position.

Stuffing the Arms.—The arms may next be stuffed up with $3\frac{1}{2}$ lb. each of coir, the scrims for

covering these being cut 24 in. by 30 in. In tacking at the front scroll pieces, the edge of the scrim is doubled in and the stuffed edge given a row of blind-stitching and a row of through-stitching, forming a roll about 1 in. in diameter, overhanging the surface of the wood by fully $\frac{3}{4}$ in. Then the inner parts of both arms and seat are tie-stitched, which advances the work to the stage shown by Fig. 117 (*see also* Fig. 118).

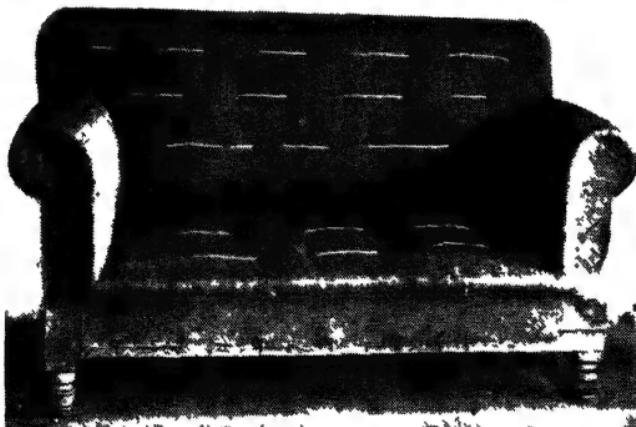


Fig. 116.—Settee Covered with Scrim.

The Final Covering.—The next consideration is the final covering material. To ascertain the quantity required, the settee can now be measured up, judging and allowing for the extra fullness of the second stuffing, which cannot be put on until the covers are ready, as this work is not done in calico under-covers.

The measurements can be taken with a tape rule and set down as follows: Back cover, 70 in.

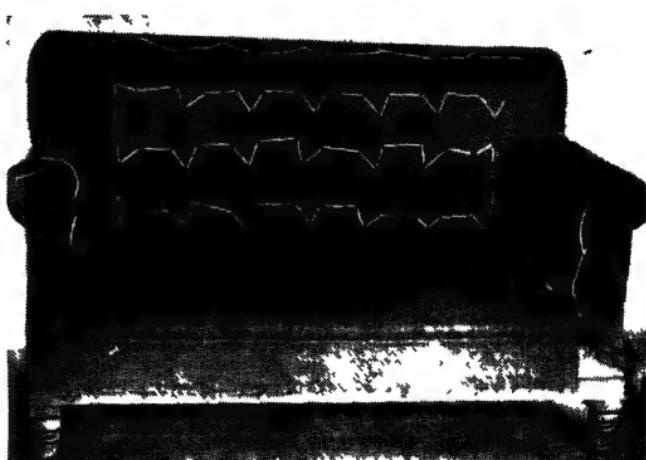


Fig. 117.—Settee Completely First-stuffed in Scrim.

by 34 in. ; seat cover, 54 in. by 34 in. ; seat facing cover, 50 in. by 6 in. ; two arm covers, 34 in. by 34 in. ; two outside arm covers, 30 in. by 16 in. ; two arm facing covers, 20 in. by $4\frac{1}{2}$ in. ; outside back cover, 60 in. by 30 in.

Now, some upholsterers, without troubling to make any particular reckoning, would say 6 yd.



Fig. 118.—Detail of Partly Adjusted End.

of 50-in.-wide material, which is about right, when the stuff is plain or of a pattern that can be put on

any way; and also when the purpose is to save time rather than the material.

A more practical way is to make a simple drawing to a scale of $1\frac{1}{2}$ in. to 1 ft., which will show exactly the best way to cut out the covers, working any seams that may have to be done to the least conspicuous parts, chiefly the outside back. This is shown in Fig. 119.

Even more practical is the method of economising the material, also working on the pattern to run all the right way, and matching seams so as not to be noticeable. This is done by measuring the sight surface for the covers and allowing for "flies" of canvas, black linen, or other scraps

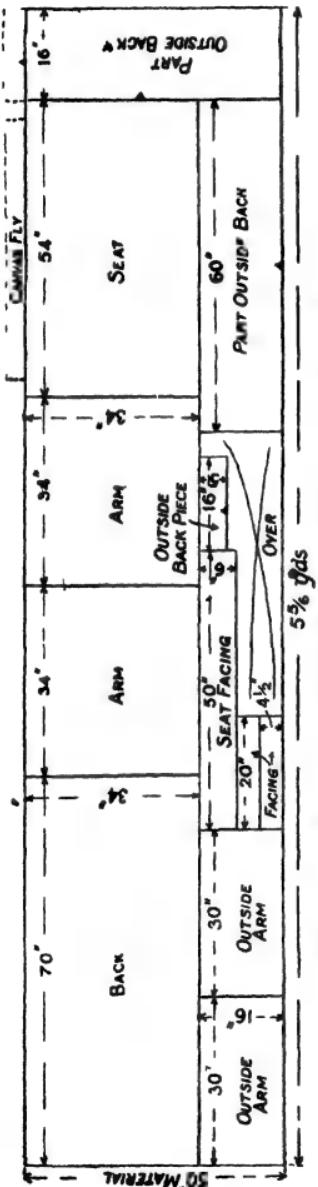
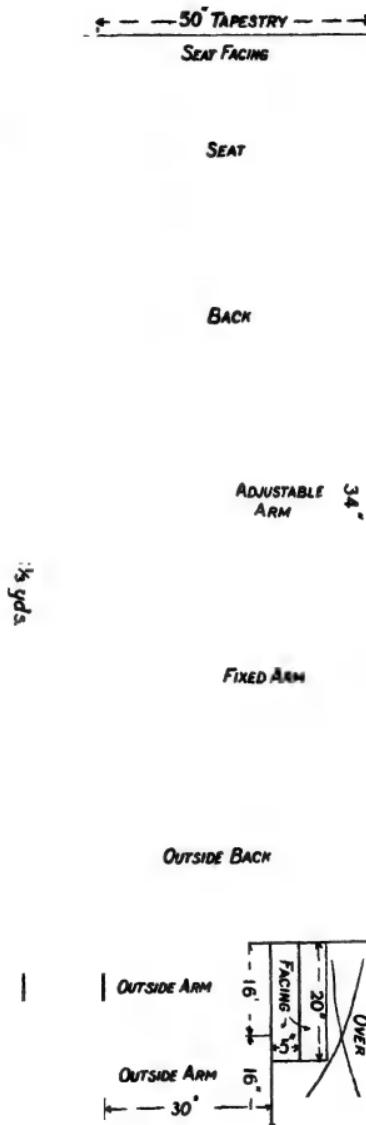


FIG. 119.—Method of Estimating Quantities of Covering Material.

of stuff sewn on for pulling through and tacking. An example is given in Fig. 120. This shows a saving of material; but sewn seams should be matched, and something over has to be allowed. For a small or reversible pattern very little over is needed, but large designs might require a yard more than the net quantity.

All things considered, the practical upholsterer finds it best to have ample covering material to get his seams correct and the pattern symmetrical; but economising still gives a further advantage. Although it is as well to avoid having pieces left over as much as possible, such pieces can be used up for foot-stools, pouffes, etc.



With this particular settee the method shown in Fig. 120 is followed, "flies" having to be sewn on to make the sizes as given in Fig. 119.

For the seat, the cover will require "flies" about 4 in. wide, sewn on the back and end edges, and it is laid on symmetrically to be pinned or baste-stitched along the front edge under the cane; then it must be drawn off to hang down over the front

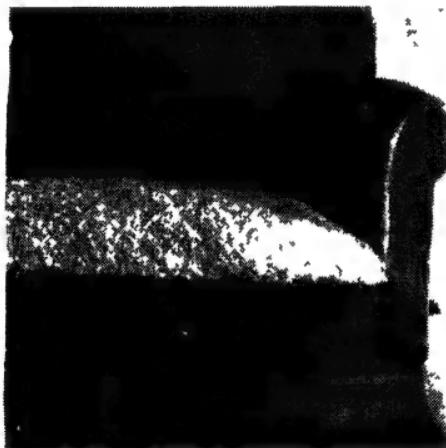


Fig. 121.—Seat Second-stuffed, with Cover Stitched Under Cane Edge.

in order permanently to stitch it with the curved needle and strong thread.

The Second Stuffing.—When that is done, the second stuffing of 7 lb. of cotton flock is packed on, as in Fig. 121. It is packed well over the front edge and the cover is drawn over to be pulled through at the back and ends, but need not be tacked, unless temporarily, if for convenience; then it will be as shown by Fig. 122. For the back, the second stuffing will take 6 lb. of the same cotton flock; and the cover,

which will require a "fly" sewn on the lower edge, may be put on to run continuous to the seat, to be tacked at the back of the rails and uprights. Each arm will require $1\frac{1}{2}$ lb. of flock; but the cover for the fixed arm only will need a fly piece sewn on the lower edge.

The Final Covering.—In putting on the covers the stuff has to be neatly gathered or pleated in when



Fig. 122.—The Seat Cover in Position.

tacking round the scroll parts. To ensure this, temporary tacking should be done until there is an even gathering of about eight neat pleats 1 in. apart. Tapestry, however, is not a difficult material to work in this respect, and with the stitched stuffed-edge overhanging, the pleat wrinkles run out clear just under the roll.

The seat cover may then be tacked at the back edge to the back rail, and the end edges to the arm rail; but at the drop end the tacking is to the

lower rail at the fixed portion, and it will be found necessary to do some stitching of the surplus stuff pulled through to the canvas to prevent any flock getting in the way of the ratchet.

The work is now advanced to the stage as shown by Fig. 123, and the next thing is to put on the outside arm or end covers. To do this the stuff is laid over the arm, face sides

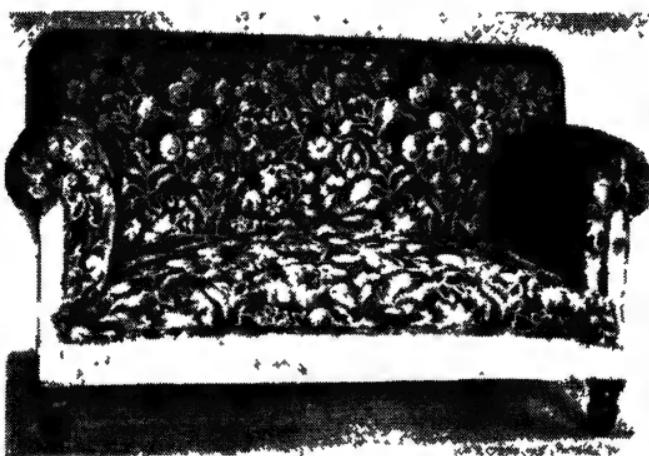


Fig. 123.—Seat, Back and Arms Covered.

together, for the upper edge to be back-tacked under the arm rail, then it is drawn down to tack the lower edge under the seat rail, and the two other edges lap round about 1 in. for tacking on the front and back uprights. The outside back cover is put on in a similar way, being back-tacked at the top edge, let down and fixed under the seat rail, but the end edges are to be turned in to the outline of the back and may be fixed neatly

with gimp pins, or stitched with suitable coloured thread.

Now the seat-facing piece is laid over the front



Fig. 124.—Padding the Seat Facing.

covered edge, tapestry face sides together, for the upper edge to be stitched under the cane, and about 1 lb. of cotton flock is padded over the front of the

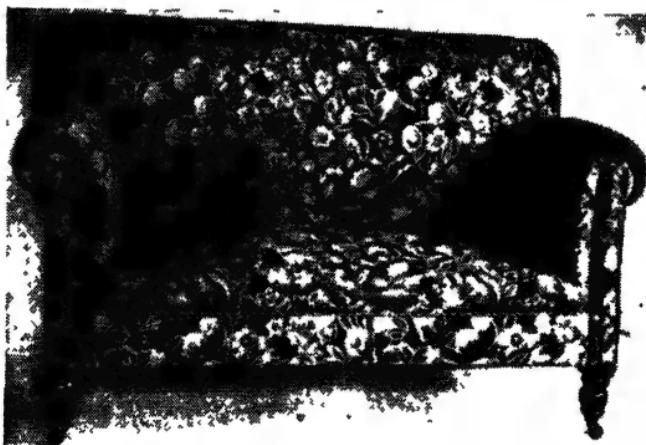


Fig. 125.—Settee Complete

spring edge, as in Fig. 124. The facing piece is then drawn over and tacked under the seat rail, also stretched straight and tacked at the ends.

The Arm Facings.—The arm facings are done in a similar way, back-tacked on the inner edge, drawn over and stitched at the corner edge, the top and bottom edges turned in and fixed with gimp pins. The stitched seams and tacked edges are finished off with cord to match the tapestry, of which it will take 4 yd. Along the seat front it must be

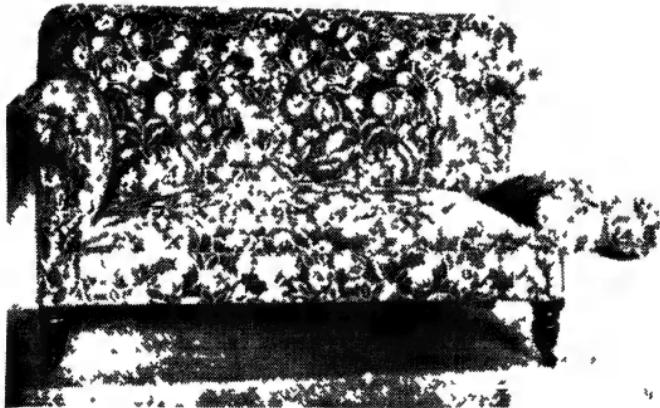


Fig. 126.—Settee Complete with End Down.

stitched with the curved needle ; but on the fronts of the arms the facings could simply be fixed with fine gimp pins.

The Bottom Canvas Covering.—Finally the work is turned upside down in a suitable position for putting on a bottom cover of canvas, and a set of iron-brassed screw castors with brown pot-bowls

and two $1\frac{1}{8}$ in. rings to fit the turned stumps. This make of castor is generally reliable, and with a touch of oil on the swivel and bowl pins will run and wear well when rightly put on.

The finished stuff-over Chesterfield is shown by Figs. 125 and 126.

CHAPTER XIV

A Spring-seat Couch

THE accompanying photographic reproduction (Fig. 127) shows the frame of a spring-seat couch belonging to a common suite of furniture consisting of seven pieces: couch, two easy chairs and four "smalls," of the type already described.

Before commencing to stuff, the showwood is



Fig. 127.—Wooden Frame of Couch Ready for Stuffing.

given a treatment of stain and polish to make it a brown oak colour, the polisher testing his stain on the inner side of the seat rails.

Stuffing the Back Arm-rail.—The first part to stuff is the back arm-rail. For this is used from 1 lb. to $1\frac{1}{2}$ lb. of wood fibre. The method of doing

this work is to cut a piece of canvas, in this case 4 ft. long by 8 in. wide, the edges to be turned in about 1 in. and tacked along the top corner edges of the stuffing rail, thus forming a kind of tunnel. Then ram the stuffing in with a stick. About a foot may be done at a time, working from the head

to the back upright, where the canvas must be turned neatly down, not tacked to it. This stuffed work is then beaten flatter to a suitable shape to be stitched to form a roll, commencing close up at the front side of the head, continuing along the edge, round the end and along the back edge to the head again.

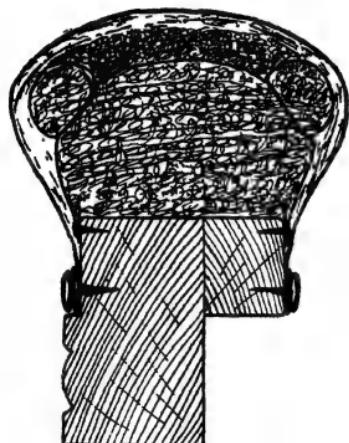


Fig. 128.—Section through Back Rail showing Details of Upholstery Work.

When this is done the shape should be as shown in Fig. 128, which also shows the finished shape.

The Head Scrolls.—The head space may next be covered with canvas, doubled over on the edges and tacked along the edges of the scrolls, stretched tightly, and from the lower stuffing rail up over the curl of the scroll ; but before tacking off at the outer edge of the upper stuffing rail, the space between it and the canvas is stuffed firmly with flock. At this stage it is shown by Fig. 129 and is ready for the main stuffing, which consists of $1\frac{1}{2}$ lb. wood fibre

to be packed on at the edges of the scrolls, which must be string-looped to retain it. Also the canvas is looped for packing evenly on $5\frac{1}{2}$ lb. of common grey flock, the whole to be covered with a piece of common canvas (cheaper than scrim) measuring 34 in. by 31 in. across. In tacking round the upper part of the scrolls the canvas has to be neatly pleated or gathered in at the doubled-in edge, to be fixed

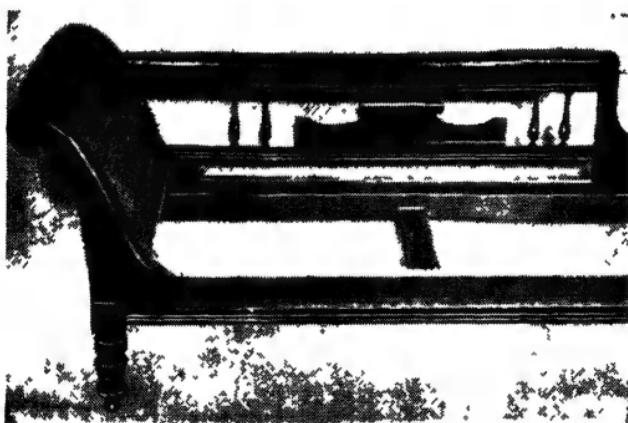


Fig. 129.—First-stuffed Back Rail and Head Canvased.

with $\frac{1}{2}$ in. tacks about $\frac{1}{2}$ in. apart. The two other edges are tacked on the outer sides of the rails.

At the face scroll the stuffed work must be blind-stitched, close to the tacks, the full length, also stitched to form the roll (Fig. 130). At the back scroll the same stitching is done from the arm pad only, round the curl.

Webbing and Springing the Bottom.—The next thing will be to turn the couch upside down, the top of the scroll head on the floor, and the foot end

of the seat supported on a stool about the height of a chair seat. This is the position for webbing the bottom on the under side of the wooden rails. The four long lengths are put on first, commencing



Fig. 180.—Couch Head First-stuffed and Stitched to Shape.

at the straight foot rail which is jointed between the legs. The lengths of web must be placed nearer to the front of the couch than the back, the first being about 3 in. from the front rail, the next 2 in. from it and these to support the first row of springs. About

3 in. farther on are the other two lengths for the second row of springs; *see Fig. 131*, which also shows the position of the cross webs.

When this is done a piece of web is tacked on the centre wooden rail to fix the long lengths at that part, otherwise the bottom would soon sag too much when in use. The illustration shows the usual meagre



Fig. 131.—Webbing Ready for Springs.

way of webbing for the sake of saving stuff and time. It will last a few years according to the usage it gets, but, of course, the more web put on the longer will it endure. Therefore, when this is desired an extra length of web may be put across between each of the others. When fully webbed in the first instance it gives greater freedom in placing the springs. However, in most cases, as in this, it is set for a dozen 9-in. springs, which are placed in position, as shown in Fig. 132, to be stitched to the webbing with the

packing needle and stitching twine, three stitches to each spring. Although this is done with the single thin twine and running stitch, it is usually found to hold the springs as long as the webbing lasts. The lower coils of the front springs are about 1 in. from the wooden rail, and second row about 3 in. from the back rail, where the webs cross.



Fig. 132.—Springs in Position on Webbing.

Canvasing the Spring.—A piece of spring canvas is now required to cover the springs completely and form the stuffed roll edge in one piece. It is first fixed along on the upper side of the back seat rail, that is, on the deal wood, which being rather soft it is better to use the $\frac{1}{8}$ in. webbing tacks inserted about $1\frac{1}{2}$ in. apart. The canvas is stretched over the springs as tightly as can be conveniently done by the hands, and tacked along the front and

foot part, the other end being pulled under the head stuffing and tacked to the end rail.

Stitching the Springs.—The springs may then be stitched to the canvas in the same manner as to the webbing, the running stitch being shown in Fig. 133, which also shows the tacking to the back rail



Fig. 133.—Springs Covered and Stitched, and Forming of Stuffed “Roll.”

and the forming of the stuffed-roll front edge. This is first string-looped, but the loops are not loose enough to sag, as only a small quantity of grey flock is to be packed under them as shown, the canvas to be pressed tightly round and tacked on the inner side. This is continued right round as far as the back upright, and it is then ready for the main stuffing, which consists of 18 lb. of grey flock simply packed evenly on and covered direct with the rexine. The

piece required for this seat must measure 5 ft. long by 3 ft. wide. Where it pulls through under the head stuffing a piece of canvas may be stitched on to reach the end rail, and before permanently tacking at that place some flock must be stuffed in under, between it and the spring canvas, so that the two stuffings press close together. At the back of the couch seat the stuff has to be cut to clear the up-

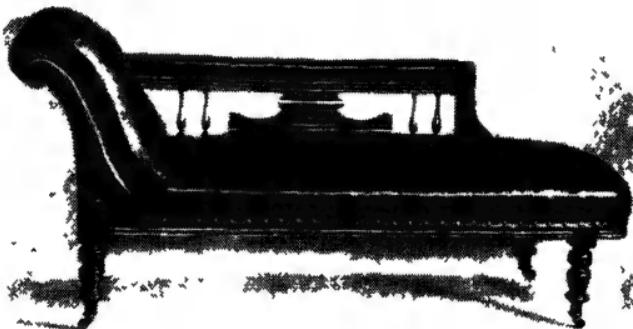


Fig. 134.—Couch Upholstered Complete.

right. It passes under the lower back rail, to be permanently tacked under the back seat rail.

Cover for the Back Rail.—For the upper stuffed back rail the cover required must measure 4 ft. long by $8\frac{1}{2}$ in. wide. Before putting it on a light second stuffing has to be spread on, consisting of $\frac{1}{2}$ lb. of soft flock and a layer or two of wadding. Where the cover is turned down at the upright the corners are neatly pleated in.

Second-stuffing the Scroll Head.—For the scroll head a second stuffing of 1 lb. of soft flock must

be packed on, and the final cover measures 34 in. by 31 in., a "fly" to be stitched on, that is, a piece of canvas, as was done for the seat cover, for pulling through. It has to be cut to clear the back rails, and must be worked into even pleats round the curl of each scroll.

Covering the Head.—A piece of stuff must then be cut as an outside cover for the head. It should be "back-tacked" over the tacked edge on the upper rail and drawn down over the space to be tacked along the edge of the scroll and the end rail. The other edge laps over and is fixed at the back side of the scroll piece. The surface of this latter will present a rough tacked appearance, which must be covered up with a piece of the rexine cut to the shape of the wooden scroll. It is doubled in and tacked in place, then all tacked edges can be covered by the banding and studs.

The couch must once more be turned upside down, taking care to put a cover on the floor on which the covered head part can rest; then extra web may be put on and the bottom canvas cover. A final polish with rubber and brush completes the couch (*see Fig. 134*).

CHAPTER XV

An Ottoman Couch

THE ottoman couch is an advance on the box ottoman, inasmuch as it serves the double purpose and provides greater capacity as a receptacle for bed linen, blankets, curtains, wearing apparel, etc., besides its accommodation for resting on. They are most frequently made in box form, but also they are con-

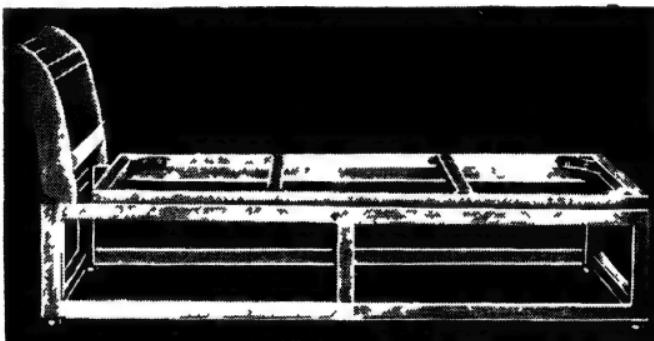


Fig. 135.—Framework for Ottoman Couch.

structed in framework, after the manner of stuff-over chair frames and couch frames. It is one of the latter that is to be described in this chapter.

The Framework.—The photograph (Fig. 135) shows the framework of the ottoman.

The seat frame is hinged with 3-in. butt hinges, and on the upper side of the stuffing rails lengths of 1-in. square wood are to be nailed flush with the

outer edge later on. At the front edges, lower end of the scroll pieces, the piece of wood nailed across is of deal 24 in. by 3 in. by $\frac{3}{4}$ in.

The bottom also is of deal boards, jointed together. It is in two parts, meeting at the centre on the bottom rail, and is fixed with fine wire nails. It must be flush with the outer surface of the rails. The bun feet are of birch turned to 3 in. diameter, and are fixed with screws. It is then ready for the upholstery work (*see Fig. 136*).

Webbing and Springing.—The seat frame is first webbed five in the length on the upper side and ten across, and is fixed, on the inner rails by a piece of doubled web tacked across the long webs. The scroll head is webbed four across (*see Fig. 137*). It is next covered with canvas, and the seventeen springs may be placed in position, as in *Fig. 138*. They are then stitched to the webbing as shown in *Figs. 139 and 140*.

The lengths of wood previously mentioned can now be nailed and the springs lashed, as in *Fig. 141*.

Canvasing the Springs.—The springs are next covered with strong canvas. The part that first gives way in the spring canvas is just at the edge of the wooden frame. Therefore, a few inches of canvas is allowed to lap back to be caught in the stitching of the springs, thus giving a double thickness (*see Fig. 142*).

Stuffing.—It is then string-looped for stuffing 4 lb. of wood fibre round the edges, 8 lb. of white

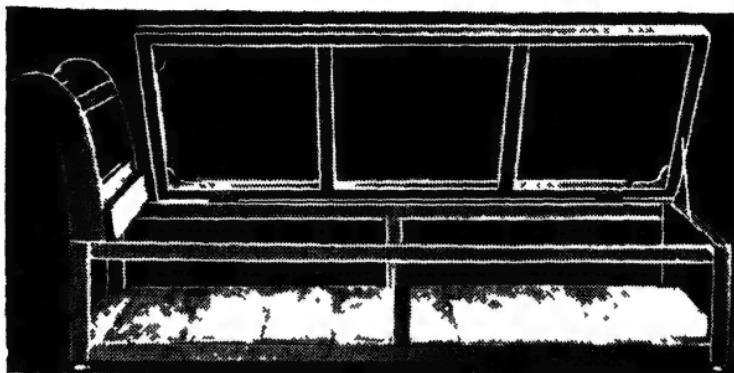


Fig. 136.—Ottoman Frame Ready for Upholstering.

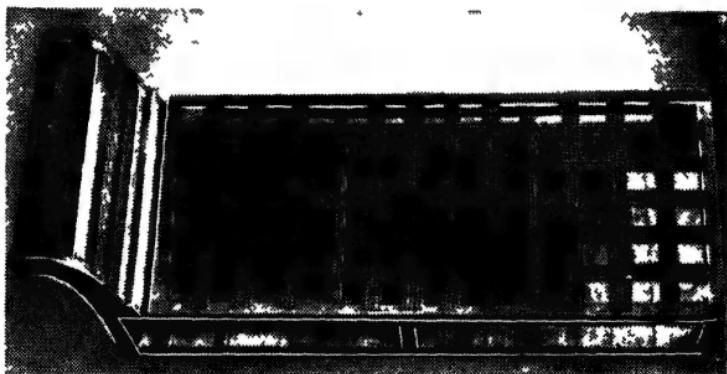


Fig. 137.—Seat Frame and Head Scroll, Webbed.

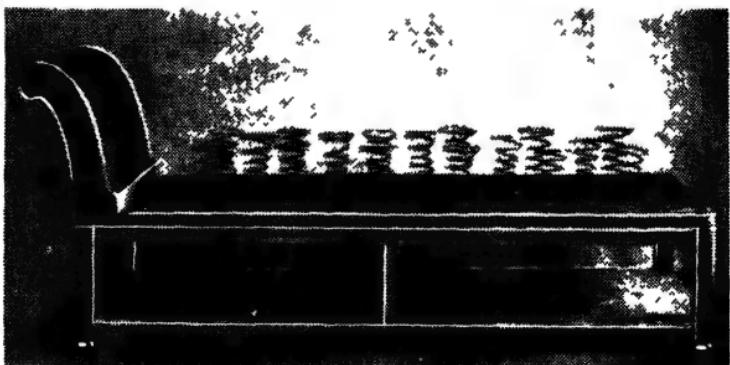


Fig. 138.—Head Canvased, Seat Springs in Position.

cotton flock to be packed inside, this being covered with scrim for two rows of blind-stitching and one for the roll.

The Head.—The head may now be string-looped over the scrolls for stuffing the edges with 2 lb. of wood fibre, $3\frac{1}{2}$ lb. of flock packed in between, covered with scrim. This is given one row of blind-stitching and one for the roll (*see Fig. 143*). Both back and front edges of the head and seat are treated alike. A second stuffing for the head is required of $1\frac{1}{2}$ lb. of soft curled horse-hair, covered with white calico, which brings it practically to the finished shape.

Second-stuffing the Seat and Lining the Inside.—
A second stuffing for the seat may be 9 lb. of mixed hair and flock, also covered with the calico, these parts being shown in *Fig. 144*.

The next thing is to line the inside of ottoman. For this 4 yd. of glazed lining, 36 in. wide, is required. The seat lid must be taken off to fix canvas over the under side, stretched tight, as a support for the lining, which is then stretched over and tacked on the edges of the frame.

The lining has to be carefully cut, measuring for the several parts and planning to get the stripes running right with each other and to show a well-thought-out method in doing the work. The small pieces to cover the four corner posts on the two inner sides of each are fixed with $\frac{3}{8}$ -in. tacks on the outer sides. On the two bars between the long rails the

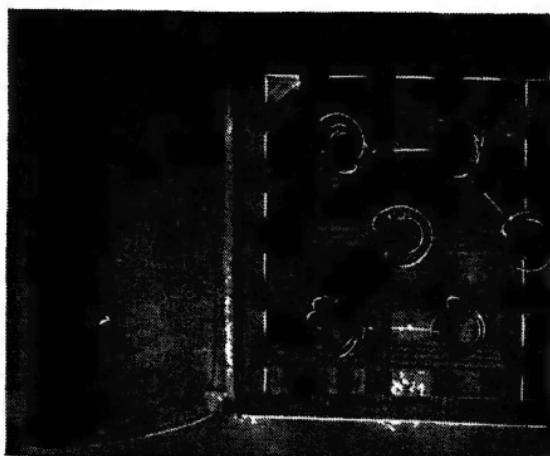


Fig. 139.—Spacing and Stitching of Springs.

stuff covers three inner sides, fixed likewise on the outer side ; the same with the four upper rails. Then the bottom can be covered, about $\frac{3}{4}$ in. of each edge lapping over for tacking to the lower rails. It is shown at this stage by Fig. 145.

Now there are two panel spaces at the front and two at the back and one at each end, over which

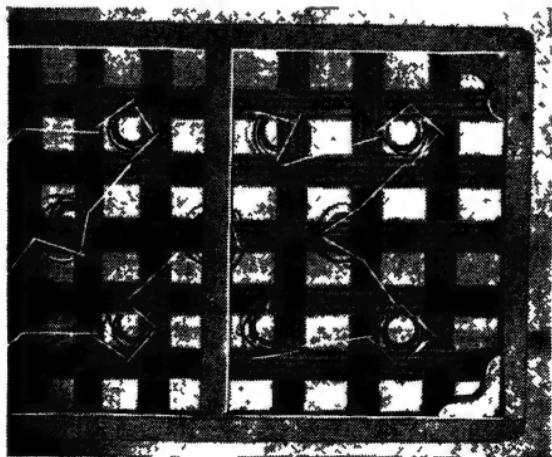


Fig. 140.—Seat Frame at Foot End.

UPHOLSTERY

the lining must be tacked on the outside, and canvas over stretched tight to support it. Further, it is

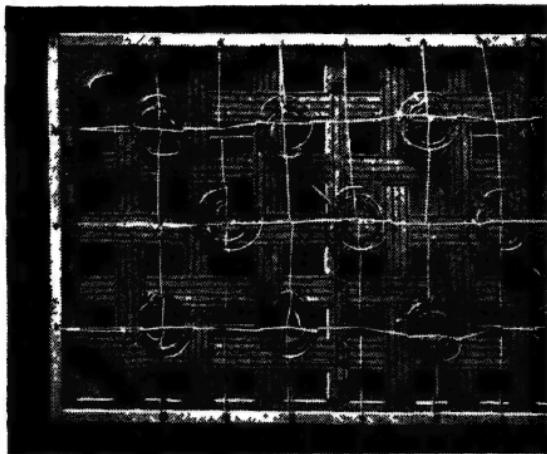


Fig. 141.—Lashing of Springs.

webbed right round, stretching over all the six lined and canvased panels, tacking on the corner post and bars. Then it is cross-webbed, three to each panel, care being taken not to strain these latter

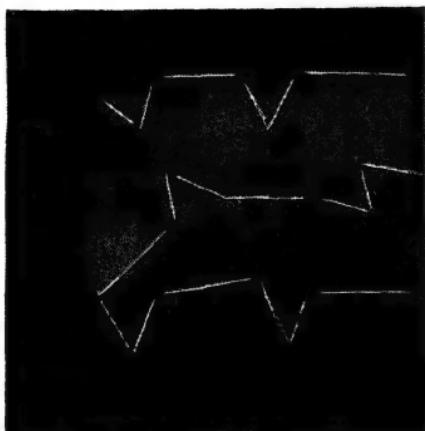


Fig. 142.—Ottoman Couch Seat Spring-canvased.

too much or it may slacken the lining. The doing of this work will be made clear from Fig. 146.



Fig. 143.—Seat and Head First-stuffed.

The Final Covering.—The ottoman is now ready for the final covering (*see* Fig. 147), which takes $4\frac{1}{2}$ yd. of tapestry 50 in. wide. This is first draped on with

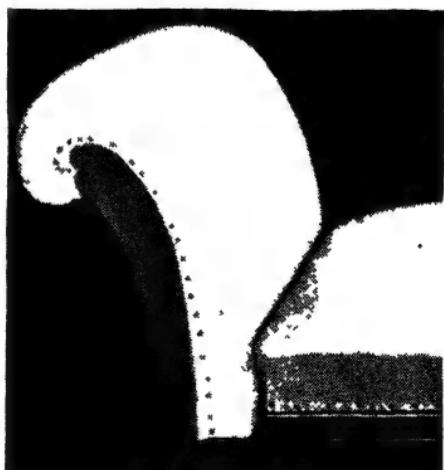


Fig. 144.—Seat and Head Second-stuffed.



Fig. 145.—Couch Frame Lined.

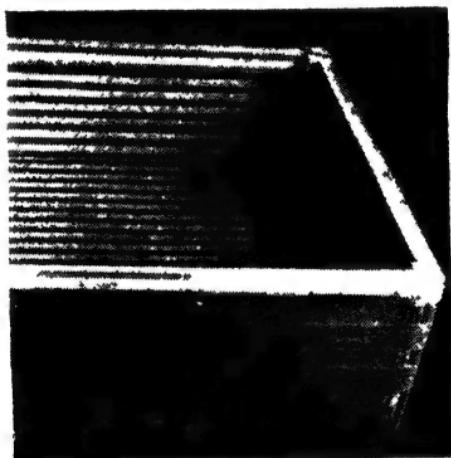


Fig. 146.—Foot Part Fully Lined Inside and Outside.

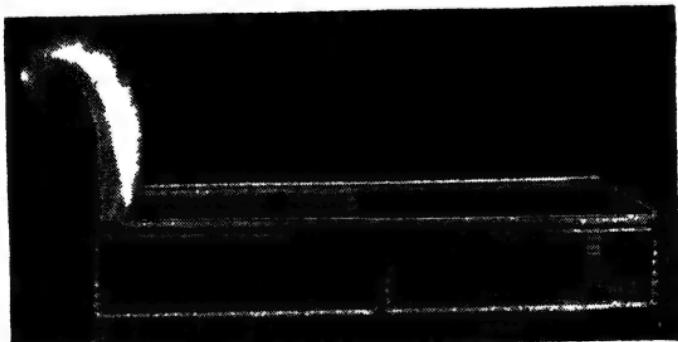


Fig. 147.—Ottoman Couch Ready for Final Covering.

temporary tacks to get the design correct and match the seam places.

Round the box part the stuff must be seamed together, making a piece about 14 ft. 6 in. by $12\frac{1}{2}$ in., to be back-tacked along the upper rails flush with the top opening side, to be drawn down over the sides, doubled in and tacked under the bottom, and for which the feet will need to be taken off. There will be a seam to stitch up by hand at the back near the head, and this can be done with the small curved needle. The feet may then be replaced and the castors put on.

Final Matters.—The seat cover must conform exactly with the front, $\frac{1}{2}$ in. being allowed on the edges for turning in and tacking ; but before putting it on the calico is covered with sheet wadding.

The head also is wadded before covering, a little hair stuffing being packed in at the part that meets the end of the seat. The head cover must be neatly gathered at the curl of the scroll, tacked on the front surface of the wood.

Over the space at the outer side of the scroll head a piece of canvas must be stretched to give support to the piece of tapestry to cover it. In putting this on it is back-tacked at the upper edge to the rail at the curl of the scroll, then drawn down to be tacked along the upper edge of the next rail, in line with the lid opening. The two other edges are tacked on the front and back surfaces of the wooden scrolls.

These surfaces are to be covered with wadding, over which scroll facings of the tapestry are fixed with gimp-pins, the edges being neatly doubled in

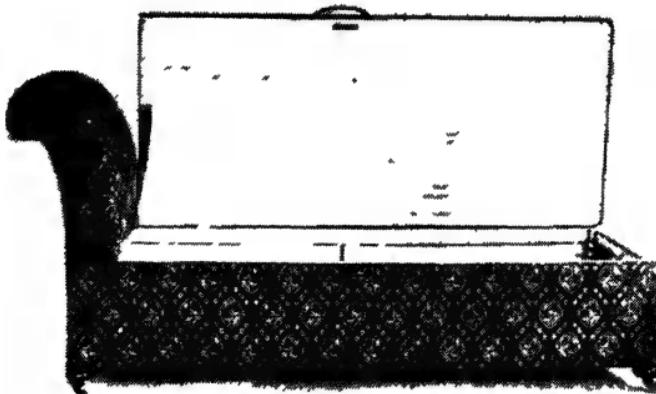


Fig. 148.—Finished Ottoman Couch, Open.

and finished with a suitable gimp. The edges of the seat-lid must likewise be gimped, and the tacked edge of the outside head cover.

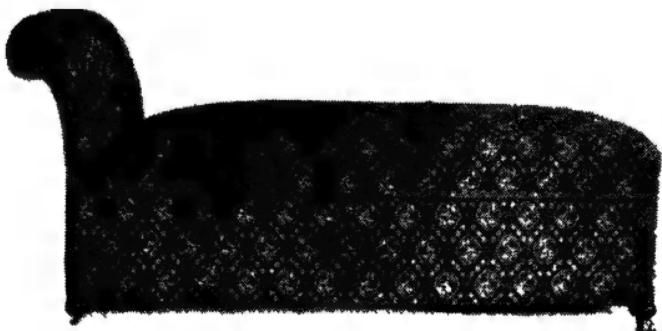


Fig. 149.—Finished Ottoman Couch, Closed.

A strap of the tapestry is made, stitched four-fold, to be fixed to the wooden head-rail and seat-rail with nickel studs to keep the lid from falling

back when open. A cord loop handle is fixed on the front edge; also a brass keyhole escutcheon at the lock place.

The finished ottoman couch is shown by Figs. 148 and 149.

CHAPTER XVI

Box Ottomans

Box ottomans are simple to make and to upholster. Of course, they can be made any size to meet individual requirements ; but the one to be described is a small though useful size, 26 in. by $12\frac{1}{2}$ in. by 15 in.

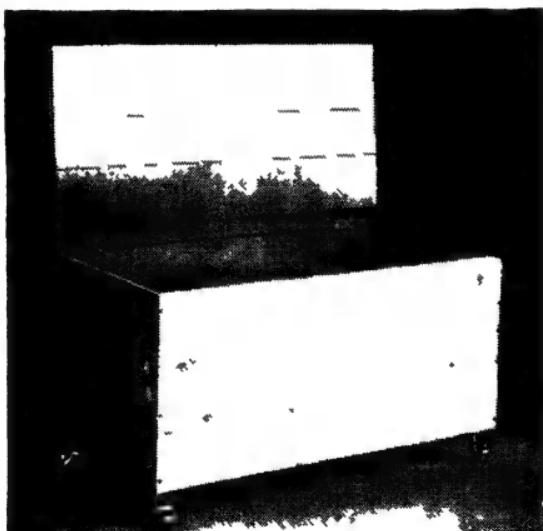


Fig. 150.—Wooden Box for Small Ottoman.

high, finished. Any suitable box or even packing-case can be converted into a box ottoman.

The photograph (Fig. 150) shows the wooden box ready for upholstering. On the upper side of the lid of the box shown a batten 2 in. wide by $\frac{1}{2}$ in. thick

has been fixed across flush with the end edges, with fine wire nails, the points clinched on the under side.

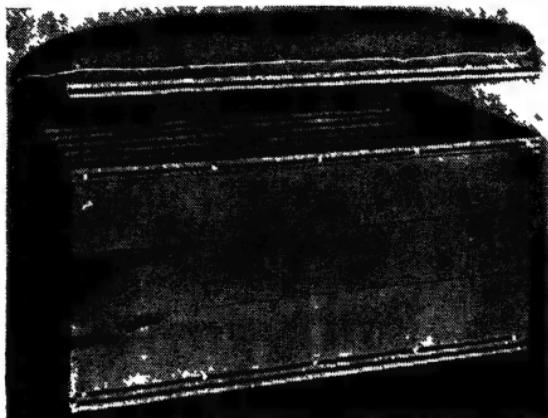


Fig. 151.—Box Lined Inside and Lid Stuffed.

Battens are then fitted between these, flush with the front and back edges, fixed likewise. It is hinged on with a pair of 2-in. brass butt hinges, fixed with

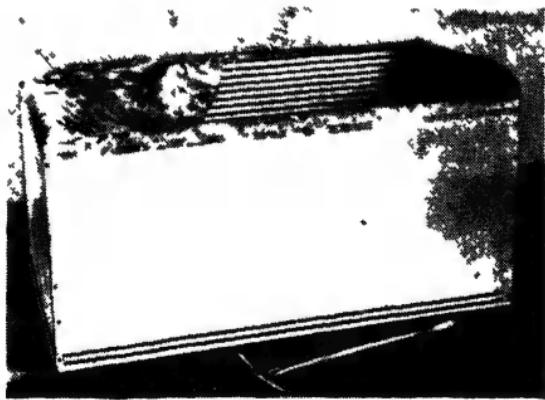


Fig. 152.—Back-tacking the Outside Cover.

screws (1-in. No. 5), these being sufficiently long and thin to give strength across the wood. At the bottom corners, feet of oak 2 in. square by $\frac{3}{4}$ in. thick are

fixed on with screws for the castors. They have to be taken off for the upholstering work ; also the box



Fig. 153.—Tacking Cover at Under Edge of Box Bottom.

bottom, which is put on with screws ($\frac{7}{8}$ -in. No. 4). It is for lining the inside of the box that the bottom

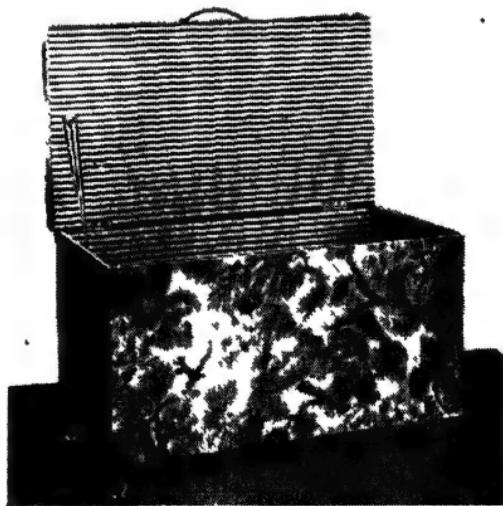


Fig. 154.—Box Ottoman, Finished, Open.

has to be removed, and the lid. A glazed lining is used for the purpose, with narrow red stripes.

Covering the Inside.—For the four inner sides of the box the stuff is cut in one long piece 76 in. by 14 in. At 1 in. from one end it is folded to form a crease to fit in one corner, the 1 in. of stuff to be on one end side of the box, and the stuff laid on one long side straight and even to be creased in the next corner. The same is done with the two other corners, and there will be about 1 in. of stuff to fold



Fig. 155.—Box Ottoman, Closed.

in over the 1 in. of surplus at the first corner. There will be about 1 in. of the stuff to lap over at the top and bottom edges of the box sides, to be fixed on the outer sides with a few $\frac{3}{8}$ -in. tacks. The inside should be quite neat and free from tacks.

The box bottom is next covered, lapping over the edges and fixed $\frac{1}{2}$ in. on the under side, and screwed in place.

The Lid.—The lid is done the same way, fixed on the upper side, and it may be re-hinged in its place. It is then string-looped and stuffed with

4 lb. of white cotton-flock covered with scrim cut 32 in. by 18 in., doubled in at the edges and fixed at the upper corner edges of the wood, using $\frac{1}{2}$ -in. tacks. It is given one row of blind-stitching and is then as shown by Fig. 151.

The Covering Material.—The covering material in this case is what is called shadow cretonne, 31 in. wide. The quantity for plain material would be

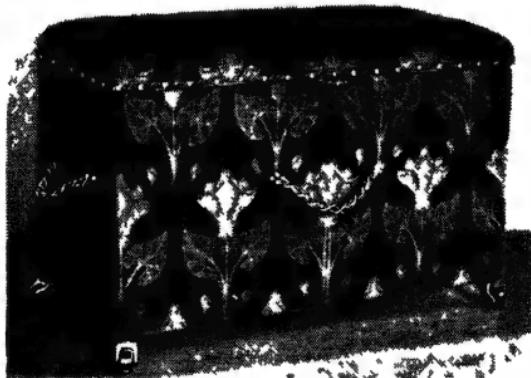


Fig. 156.—Box Ottoman in Tapestry.

$1\frac{1}{2}$ yd.; but to get this design on symmetrically a $\frac{1}{4}$ yd. extra is allowed.

The stuff is laid on over the box front and stuffed lid, being just the neat width for the latter, but it laps on to the end sides of the box a few inches. At the lower edge 1 in. must be allowed for doubling in under the bottom, also 1 in. at the top edge for back-tacking, and it is cut off straight. On the cover for the lid $\frac{1}{2}$ in. over must be allowed at each long edge for doubling in, and this, after covering the scrim with a couple of layers of wadding, may be

fixed with $\frac{1}{2}$ -in. tacks on the outer edges of the lid, the stuff being neatly pleated in at the corners. This is the only tacked edge which requires to be covered with a suitable gimp, fixed with fine gimp-pins.

In covering the box it will be found handier without the lid. The stuff is draped on with temporary tacks, the pattern to be matched as near as can be where it will be necessary to seam the pieces together. The corners of the wood should be rasped slightly round and the cover fit fairly tight.

Back-tacking.—For back-tacking, the seamed-up cover is turned inside out and placed lying in the box with the edges over the sides 1 in. for fixing with $\frac{3}{8}$ -in. tacks. Then some straight strips of thin stiff cardboard are cut $\frac{1}{2}$ in. wide and tacked along flush with the upper edges of the wooden sides, as seen in Fig. 152. The cover should be carefully drawn over, the lower edges doubled in and tacked $\frac{1}{2}$ in. on to the bottom (*see* Fig. 153).

The feet can be put on with a touch of glue as well as the screws, as the wooden bottom is rather thin, and the castors should have a slight touch of oil on the swivel and bowl pins.

The Stop for the Lid.—To keep the lid from falling back when open, a strap is made from a strip of the lining doubled four-fold, fixed with nickel studs as in Fig. 154, which also shows the simple loop handle of upholstery cord fixed on the front edge of the lid and on each end of the box (*see also* Fig. 155).

Another Type of Box Ottoman.—Fig. 156 shows another box ottoman which is made in $\frac{3}{4}$ -in. wood, and the castors can be put on without needing feet. The upholstery is of tapestry, and it will be noticed that it is put on as nearly symmetrical as may be. The tacked edge of the lid is covered with cord and nickel studs, and the handles are of a thick quality of cord.

INDEX

ALGERIAN grass, 16
Alva, 15
American cloth, 9
Art serge, 12

BANDING and studding chair seat, 43
Bandings, 14
Bayonet needle, 1
Bedroom chair, 24
Bent needles, 3
Black linen, 19
Blind stitching, 35
Box ottomans, 145
Buttons, 14, 19

CABRIOLE hammer, 4
Calico, 19
"Cards," 6
Carriage cloth, 12
Chair cushion, 84
—, dining-room, 32
—, drawing-room, 30, 45
—, lift-off seat, 51
—, occasional, 27
—, Queen Anne, 51
— seat, banding and studding, 43
—, canvassing, 33, 40, 46, 72
—, springing, 63, 70
—, stuffing, 26, 34, 40, 48, 58, 59, 64, 74, 77
—, webbing, 25, 33, 40, 45, 57
—, "showwood" easy, 59
—, stuff-over easy, 69
Chesterfield, 107
—, covering, 116
—, springing, 109
—, stuffing, 112
—, webbing, 108
Chisel, ripping, 4
Coir, 15
Cord, 14
—, laid, 18
Corduroy, 13
Cotton wool, 16
Couch, canvassing, 131
—, covering, 133
—, ottoman, 135
—, springing, 128
—, webbing, 128
— with spring seat, 126
Cretonnes, 13

Cushion for chair, 84
Cutting up materials, 20

DRAWING-ROOM chair, 45

EASY chair, "showwood," 59
— —, "stuff-over," 69
Edging nails, 14

FENDER stool, 94
Footstools, 85
—, webbing, 89
Frames for furniture, 19
Furniture frames, 19

GENOA velvet, 11
Gimp, 14
Grass, Algerian, 16

HAIR seating, 12
Hammer, cabriole, 4
—, studding, 5
—, upholsterer's, 4
Hessian, 18
Horsehair, 15
— "card," 6

KNIFE, trimming, 5

LAID cord, 18
Leather, imitation, 9
Linen, black, 19

MATERIALS, 8
—, cutting up, 20
Moquette, 10
Morocco, 8
Music stools, 101
— — with box seat, 102

NAILS, edging, 14
Needle, bayonet, 1
—, bent, 3
—, spring, 1
—, stitching, 1

INDEX

OTTOMAN couch, 135
 —— ——, canvassing, 136
 —— ——, springing, 136
 —— ——, stuffing, 136
 —— ——, webbing, 136
 Ottomans, box, 145

PANTOSITE, 9
 Pegamoid, 9
 Pigskin, 9
 Pincushion chairs, upholstering,
 23
 Plush, 11
 Plushtette, 12
 Pouffe, 96

QUEEN ANNE chair, 52

REGULATORS, 3
 Repps, 12
 Rexine, 9
 Ripping chisel, 4
 Roan, 8
 Roanoid, 9
 Rope, 14
 Rouch, 14

SADDLEBAGS, 11
 Sateens, 13
 Scrim, 18
 ——, attaching to chair seat, 34
 Serge, 12
 "Showwood" chair, 59
 Spring, 17

Spring needle, 1
 Springing chair seat, 63, 70
 Stamper velvet, 11
 Stitching, blind, 35
 —— needle, 1
 Stools, 85
 ——, fender, 94
 ——, music, 101
 Strainers, web, 5
 Stripping, 23
 Studding and banding chair seat,
 43
 —— hammer, 5
 Studs, 14
 Stuffing "cards," 6
 —— materials, 15
 Stuff-over easy chair, 69

TACKS, 19
 Tapestries, 9
 Thannette, 9
 Trestles, 6
 Trimming knife, 5
 Twine, 18

UTRECHT, 10

VELVET, Genoa, 11
 ——, stamped, 11

WADDING, 16
 Web strainers, 5
 Webbing, 17
 Wood fillings, 16
 Woodwool, 15

Amateur Wireless Handbooks

16 each
NET

or 1/9 post free
from The Editor
"AMATEUR
WIRELESS"

Wireless Telephony Explained

CONTENTS : The Electron; Induction and Electro Magnetism; Waves and How They Travel; Inductance and Capacity; Rectification; Amplification; Reaction and Beat Reception; Aerials and Earths; Transmitting Systems; Receiving Sets; Useful Formulae and Data; Index.

Simple Valve Receiving Sets and How to Make Them

CONTENTS : A Single-valve Set with Basket-coil Tuner; A Single-valve Set with Slide Inductance; A Single-valve Autodyne Receiving Set; One-valve Varioimeter Set; A Portable Single-valve Set; Adding a Valve; A Two-valve Set; A Three-valve Amplifying and Detecting Unit; The "Amateur Wireless" Unit Set; An Improved Unit Set; Index.

Simple Crystal Receiving Sets and How to Make Them

CONTENTS : A Simple and Efficient Receiving Set; A Single-slider Set; Set with Semicircular Tuner; Crystal Set with Tapped Single Coil; A Loose-coupled Set; Set with Plug-in Basket Coils; Combined Crystal and Valve Receiver; Some Miniature Receiving Sets; Crystal Circuits; How Crystals Work; Making a Buzzer; Receiving C.W. Signals on a Crystal Set; Converting Low-resistance Phones; The Morse Code; Index.

Wireless Component Parts and How to Make Them

CONTENTS : Components and Their Varied Purposes; Crystal Detectors; Coils, Making and Mounting; Condensers; Varioimeters and Vario-couplers; Resistances or Rheostat; Transformers; Making a Test Buzzer; Index.

Each Book being Well Illustrated and Thoroughly Practical

Cassell & Co., Ltd.,



La Belle Sauvage, E.C.4

